

## CHAPTER 3.0 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT WHICH CAN BE MITIGATED

### 3.1 Biological Resources

General and focused biological surveys were conducted of the Project Site and off-site improvement areas between June 2002 and July 2008 to gather information about the site's biological resources. The biological resources assessment in the form of the Biological Technical Report (2009) is included as Appendix F-1 to this EIR.

Sensitive plant surveys were conducted between mid-October 2003 and late-August 2004. Special emphasis was placed on searching for threatened, endangered, and otherwise sensitive plants that might be present on-site. Surveys also focused on determining the presence of vernal pool indicator species, rare species, and narrow endemics. Additional sensitive plant surveys were conducted in 2005 and 2006.

Focused surveys for sensitive wildlife species included:

- Habitat assessment for the federally endangered quino checkerspot butterfly (*Euphydryas editha quino*) conducted in early January 2004 and repeated in April 2005;
- Presence-absence surveys for coastal California gnatcatcher performed each year from 2003 through 2008;
- Surveys and pitfall trapping study for Arroyo toad were performed each year from 2003 through 2007;
- Habitat assessment for the least Bell's vireo in 2003 and 2004 and presence-absence surveys were conducted in 2007 and 2008; and
- Presence-absence surveys for the southwestern willow flycatcher were performed in 2007 and 2008.

A jurisdictional delineation report was completed in 2005 and updated in 2008 (Appendix F-2) to identify wetlands and waters of the U.S. under the jurisdiction of the CDFG (Section 1603 of the Fish and Game Code); the ACOE (Section 404 of the CWA); the RWQCB (Section 401 of the CWA); and the County of San Diego.

In addition, RECON prepared a Conceptual Resource Management Plan (2009) to provide direction for the permanent preservation and management of the on-site open space to be included in a conservation easement and a Wetland Mitigation Plan to address the mitigation requirements for impacts to jurisdictional waters, including wetlands. These reports are included as Appendix F-3 and F-4 respectively.

#### 3.1.1 Existing Conditions

The biological resources found on the Project Site are shown on Figure 3.1-1 and summarized below. They are described in detail in Appendix F-1.

#### ***Existing Regulations***

Biological resources are subject to regulatory oversight at three levels: federal, state, and local (County of San Diego).

## Federal Regulations

### Endangered Species Act

The federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a 'take' under the Endangered Species Act. Take of a federally listed threatened or endangered species is prohibited without a special permit. The Endangered Species Act allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS and an incidental take permit has been issued. The Endangered Species Act also allows for the take of threatened or endangered species after consultation has deemed that development activities will not jeopardize the continued existence of the species. The federal ESA also provides for a Section 7 Consultation when a federal permit is required, such as a Clean Water Act Section 404 permit. It is this vehicle that the applicant will be using.

"Critical Habitat" is a term within the federal Endangered Species Act designed to guide actions by federal agencies (as opposed to state, local, or other agency actions) and defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species."

### Section 404 Clean Water Act Regulations

The Clean Water Act (CWA) provides wetland regulation at the federal level and is administered by the ACOE. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting is required for filling waters of the U.S. (including wetlands). Permits may be issued on an individual basis or may be covered under approved nationwide permits.

### Regional Water Quality Control Board (RWQCB)

The RWQCB not only regulates impacts to waters of the U.S. under the CWA, but also regulates the isolated waters that are impacted under the state Porter Cologne Act utilizing a Waste Discharge Requirement. The Chief Counsel for the State Water Resources Control Board recently issued a memorandum which affects the Section 401 Water Quality Certification Program. In this memorandum the SWRCB's Chief Counsel administratively expands SWRCB's own definition of "waste" to include discharge of fill material into isolated waters of the United States. Consequently, discharge of fill material into waters of the State not subject to the jurisdiction of the Corps pursuant to Section 404 of the Clean Water Act may require authorization pursuant to the Porter Cologne Act through application for waste discharge requirements (WDRs) or through waiver of WDRs, despite the lack of a clear regulatory imperative.

### Migratory Bird Treaty Act (MBTA)

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act (MBTRA) of 2004 (FR Doc. 05-5127; USFWS 2004). The MBTA is generally protective of migratory birds.

### State of California

#### California Endangered Species Act

The California Endangered Species Act, similar to the federal Endangered Species Act, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation “rare species” applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the California Endangered Species Act. State threatened and endangered animal species are legally protected against “take.” The California Endangered Species Act authorizes CDFG to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met.

#### State Species of Special Concern

Species of special concern is an informal designation used by the CDFG for some declining wildlife species that are not officially listed as endangered, threatened, or rare. This designation does not provide legal protection, but signifies that these species are recognized as vulnerable by CDFG.

#### California Fully Protected Species

Species that are California fully protected include those protected by special legislation for various reasons, such as the white-tailed kite (*Elanus leucurus*).

#### Wetlands Regulations

The California Fish and Game Code (Sections 1600 through 1603) requires a Streambed Alteration Agreement with CDFG for projects affecting riparian and wetland habitats.

### County of San Diego

#### Multiple Species Conservation Program (MSCP)

The NCCP program of the Department of Fish and Game, pursuant to the California Fish and Game Code Section 2800-2835 (the NCCP Act), identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. To implement the NCCP, the County, along with other local agencies, is in the process of preparing MSCPs. The goal of the MSCP is to maintain and enhance biological diversity in the region and maintain viable populations

of endangered, threatened, and key sensitive species and their habitats while promoting regional economic viability through streamlining the land use permit process.

The County is currently in the process of creating a MSCP for the unincorporated areas of northern San Diego County. The MSCP generally does not designate an exact preserve boundary, but instead designates large Pre-approved Mitigation Areas (PAMAs) within which conservation efforts are to be concentrated and a preserve will be assembled. The MSCP generally provides incentives for development to occur outside of a PAMA.

A hardline is a designation that has been agreed upon between landowners, the wildlife agencies, and the County. The hardline defining preserve and development areas has been negotiated for a few properties, including Meadowood for the North County MSCP. In such areas, preservation and development area decisions were made during MSCP development with respect to the location of open space and development. The draft North County MSCP map shows certain areas of the Project Site as “take authorized” and others as preserved. The open space in Meadowood is connected to other proposed PAMAs to the north and east, forming part of a large habitat block that extends from I-15 east to the Pala Indian Reservation and beyond. See Figure 3.1-2 for the draft North County MSCP designations.

#### Habitat Loss Permit Ordinance

The County regulates coastal sage scrub habitat loss through the Habitat Loss Permit (HLP) Ordinance. An HLP is a process that enables the County of San Diego to issue “take” permits for the federally listed coastal California gnatcatcher, as allowed through the federal Endangered Species Act. An HLP application must be filed with the County and approval requires concurrence from USFWS and CDFG. Approval is based on Findings made pursuant to the County’s HLP Ordinance (1994) as required by the NCCP Process Guidelines. Until the North County MSCP is approved, the HLP is required for all coastal sage scrub impacts, whether or not the coastal California gnatcatcher occupies the habitat. An HLP also requires a mitigation plan for impacts to coastal sage scrub and disturbed coastal sage scrub.

#### Resource Protection Ordinance

The Resource Protection Ordinance (RPO) limits impacts to several sensitive natural resources found throughout San Diego County. These sensitive resources include wetlands, floodplains, steep slopes, sensitive habitat lands, and prehistoric and historic sites. A Resource Protection Study pursuant to Sec.86.605(b) is required for discretionary projects that may affect these sensitive natural resources. Several sections of the RPO are pertinent to the Proposed Project.

As detailed within the Biological Technical Report and discussed below, there are no wetlands on-site that meet the RPO standard as “wetlands.” Many of the wetlands on or adjacent to the site are fed by agriculture runoff. These wetlands are isolated and not considered an RPO wetland under Section 86.602 (q)(2)(aa). Some road construction associated with off-site improvements will impact RPO wetlands on adjacent properties. However, the Specific Plans associated with these properties have been exempted from the provisions of RPO, thus impacts are allowed.



Under the RPO, a wetland buffer is required where development is adjacent to wetland areas (Sec. 86.604[b]). In addition, encroachment into RPO steep slopes lands (25 percent or greater grade for 50 or more feet) must be minimized in accordance with Section 86.604 (e).

Under the RPO Sec. 86.602(n) habitat such as occupied coastal sage scrub is a “sensitive habitat land” as it is substantially depleted in the region and is habitat for the federally threatened coastal California gnatcatcher. Habitat associated with a functioning wildlife corridor is also defined as a “sensitive habitat land” under the RPO Sec. 86.602(n).

As required by the RPO, impacts to sensitive habitat lands must be minimized and mitigated.

### ***Vegetation Communities***

Eleven plant communities, or habitats, were identified on the Project Site: agricultural (209.9 acres); coastal sage scrub (56.5 acres); disturbed coastal sage scrub (30.6 acres); southern mixed chaparral (19.6 acres); coast live oak woodland (1.7 acres); willow/mule fat scrub ( $\leq 0.1$  acres); open water/pond (0.7 acres); non-native grassland (31.9 acres) non-native trees (8.3 acres); pastureland (1.5 acres); and developed or disturbed areas (28.7 acres).

Habitats identified on the off-site improvement areas (grading, roads and waterlines) include: agricultural (3.8 acres); coastal sage/ disturbed coastal sage scrub (1.9 acres); coast live oak woodland (0.2 acre); southern willow scrub (1.0 acre); fresh water marsh (0.3 acre); non-native grassland (5.4 acres) non-native trees (1.02 acres); southern arroyo willow riparian forest (2.77 acres); pastureland (28.7 acres); and developed or disturbed areas (19.5 acres).

A wetland exists off-site on the adjacent Campus Park project site, west of the Proposed Project. The Proposed Project assumes this wetland will remain intact and as discussed throughout this section, includes an on-site wetland buffer.

The extent and location of these vegetation communities are shown in Figure 3.1-1 and the acreage of each vegetation community on the Project Site is listed in Table 3.1-1.

#### **Agricultural**

Most of the Project Site has been used for various agricultural activities, with extensive areas supporting citrus and avocado orchards occupying the lower and mid-portions of ridges and slopes in the central portion of the site. These areas are irrigated, and the trees are maintained by periodic trimming and pruning. In the narrower portion to the south are seasonally planted fields.

#### **Coastal Sage Scrub**

Coastal sage scrub vegetation occurs predominantly on west- and south-facing slopes, including the southern and western slopes and ridgetops of Monserate Mountain along the northern and eastern boundaries of the Project Site. This plant community is

characterized by the presence of drought-tolerant shrubs, most of which are also drought-deciduous.

#### Disturbed Coastal Sage Scrub

Portions of the west-facing slopes of Monserate Mountain were mapped as disturbed coastal sage scrub where previously removed sage scrub vegetation is recovering. In these areas, there is a mixture of sage scrub plant species with annual grasses, mustards, and other grassland elements.

#### Southern Mixed Chaparral

Southern mixed chaparral is the second most dominant native plant community within the boundaries of the Project Site. Chaparral is characterized by deep-rooted evergreen leafy shrubs that form dense and often impenetrable canopy. This plant community frequently occurs on dry, rocky and steep terrain. It generally grows from four to 15 feet in height with little to no understory, due to the uniformly dense canopy.

#### Coast Live Oak Woodland

Coast live oak woodland is represented by a few individual trees and two small groves on the moderate to steep slopes in the eastern portion of the Project Site. The oaks are associated with other plant communities occurring on the site, including coastal sage scrub, southern mixed chaparral and annual grassland.

#### Willow/Mule Fat Scrub

A small drainage runs through the western boundary of the Project Site and supports small arroyo willows and mule fat.

#### Open Water Ponds

Traces of riparian-associated plant-life are growing along the edges of two artificial detention basins, or irrigation ponds, used to store water for agricultural purposes and supporting traces of riparian vegetation along edge. There are additional ponding areas situated in the central portion of the site, within the citrus and avocado orchards. They do not comprise a distinct habitat type or plant community, and are not jurisdictional wetlands.

#### Non-Native Grassland

Non-native grassland vegetation is characteristically dominated by grasses, or co-dominant with various forbs. Non-native or annual grassland is found in areas where the soil has been disturbed, generally through agricultural activities.

#### Non-Native Trees

Non-native trees are scattered throughout the southern half of the Project Site associated with developed areas of the Project Site. The majority of the non-native trees are eucalyptus.

### Pastureland

The western edge of the Project Site is occupied by small strips of pastureland which continue to the west and provide pasture for grazing livestock. Pastureland consists of non-native grasses and forbs cut low to the ground by grazing animals.

### Graded and Developed Areas

A network of graded dirt roads has been created to provide access throughout the Project Site, reaching various portions of the citrus and avocado orchards, as well as adjacent slopes. Two small areas in the extreme southern and central areas of the Project Site have houses with landscaped yards.

### ***Special Status Biological Resources***

Special status biological resources include declining habitats and species that have been accorded special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise of concern. Complete definitions of these special status categories is found in the Biological Technical Report (see Appendix F-1). Databases of such resources are maintained by the CDFG, the USFWS, and special groups such as the California Native Plant Society (CNPS).

### Habitats

Several plant communities or habitat types are considered sensitive by the CDFG's California Natural Diversity Data Base (CNDDDB) because they are scarce and/or because they potentially support state and/or federal listed endangered or threatened wildlife species and/or vascular plant species. The only such plant community on-site is coastal sage scrub. It is considered a highest-inventory priority community by the CDFG, indicating that it is declining in acreage throughout its range due to land use changes. Coastal sage scrub, including regenerating coastal sage scrub following disturbance, occurs on ridges and south- and west-facing slopes. This community supports a number of special status species including the coastal western whiptail, coast horned lizard, southern California rufous-crowned sparrow, Bell's sage sparrow, and San Diego black-tailed jackrabbit. Coastal sage scrub on and in the vicinity of the Project Site has been known to support the federally threatened coastal California gnatcatcher. Coastal sage scrub has been state-ranked as S3.1 by the CNDDDB.

### Wetlands/Jurisdictional Waters

Wetlands are considered a sensitive biological resource. Disturbance to wetlands is regulated by several agencies, all of which have very specific definitions. There is considerable overlap among the various jurisdictions. The definitions, findings, and calculated impacts to the various jurisdictional areas are described in detail in the Revised Jurisdictional Delineation (2008), included as Appendix F-2 to this EIR and summarized below.

#### ACOE Jurisdiction

There are 0.83 acres (35,965 ft<sup>2</sup>) of waters of the United States under the jurisdiction of the ACOE, of which 0.14 acre consist of jurisdictional wetlands. The drainage located in

the central portion of the Project Site, (also referred to as "Drainage 4" in the Biological Technical Report and Revised Jurisdictional Delineation), supports the entirety of the 0.14-acre jurisdictional wetlands. In addition to the 0.83 acre of ACOE jurisdictional waters, there is 0.06 acre of isolated waters, none of which consist of wetlands.

#### CDFG Jurisdiction

There are 0.93 acres (40,618 ft<sup>2</sup>) of area under the jurisdiction of the CDFG, of which 0.34 acre consist of vegetated riparian habitat.

#### County of San Diego

There are no County RPO wetlands on-site. Although the drainage located in the central portion of the Project Site supports several riparian vegetation species, including some sparse mule fat and willows and hydric soils, this drainage is not considered an RPO wetland. Section 86.602(q)(2)(bb) of the RPO states that lands that have been disturbed by past legal actions, have negligible biologic function and value, and that do not support a substantial or locally important population of wetland dependent species, are not considered to be "wetlands". The wetland attributes in this drainage are the result of legal agricultural irrigation runoff, the biological functions and values are negligible, and the area does not support any substantial or locally important wetland dependent species. Therefore, the on-site ephemeral drainage features do not support hydrophytes, undrained hydric soils, or a water table that is usually at or near the ground surface. As such, they do not meet the County's wetland definition in the RPO.

#### Sensitive Plants

No special status plant species were detected on the Project Site. Several special status plant species have been recorded within the vicinity of the Project Site; however, none of these species were identified on-site. Sensitive plants potentially occurring on the Project Site are listed in Table III of Appendix F-2.

#### Sensitive Wildlife

##### *Agency-listed Animal Species Found on the Site or Immediate Vicinity of the Site*

Federally listed wildlife species detected in the vicinity of the Proposed Project are illustrated on Figure 3.1-3; Figure 3.1-4 indicates Critical Habitat areas in the Proposed Project vicinity. Sensitive wildlife species observed on the Project Site, as well as other sensitive wildlife potentially occurring but not observed are listed in Table IV of Appendix F-2.

Two federally or state listed wildlife species, arroyo toad (endangered) and coastal California gnatcatcher (threatened), were detected on-site. Two other species of wildlife listed by either the USFWS or the CDFG as threatened or endangered are known to occur in the immediate vicinity of the Project Site: least Bell's vireo and southwestern willow flycatcher. Least bell's vireo has been detected near off-site improvement areas. These four species are discussed below.

**Arroyo Toad (*Bufo californicus*)**

STATUS: Federal Endangered, Group 1.

HABITAT: Restricted to open riparian woodlands and alluvial habitats, where it breeds in shallow, gravelly, slow-moving streams and pools. It is a habitat specialist, requiring exposed shallow, gravel- or sand-based pools with low current velocity and little marginal vegetation in streams free of predatory fishes.

DISTRIBUTION: Foothill regions in southern California below 3,000 ft (900 m) elevation from San Luis Obispo County to Baja California. It historically occurred along the length of drainages, including coastal areas, but now survives generally in the headwaters as small isolated populations.

OCCURRENCE ON-SITE: One individual was observed on the site south of the former alignment of SR-76 in 2007 (Cadre 2008).

OCCURRENCE OFF-SITE: Several individuals have been observed off-site south of the former alignment of SR-76 and north of the San Luis Rey River between 2003 through 2007 (Cadre 2008).

OPTIMAL SURVEY PERIOD: Breeding season surveys, April to June.

No arroyo toads had been observed within the Project Site boundary between 2003 and 2006. In 2007, one individual was observed in the southernmost portion of the Project Site's panhandle, just south of the former alignment of SR-76. Several arroyo toads have been recorded off-site. Six individual arroyo toads were detected during focused arroyo toad surveys within the San Luis Rey River upstream from the site, and two individuals were documented using the road network 140 feet south and 400 feet east of the Project Site (south of SR-76) during the 2003 surveys. During the 2004 surveys, no arroyo toads were documented using the road network immediately adjacent to the Project Site; however two individual arroyo toads were documented upstream and one individual was documented downstream within the San Luis Rey River. In 2005, three arroyo toads were observed within the San Luis Rey River southwest of the Project Site. In 2006, 52 arroyo toad observations (pitfall trapping and focused surveys) were made south of the Project Site in the new pitfall trap lines located adjacent to the river. In 2007, four arroyo toads were captured in pitfall traps within/adjacent to the San Luis Rey River (Figure 3.1-3).

Four categories of arroyo toad habitat were identified on and in the vicinity of the Project Site: potential breeding, high quality foraging/aestivation, low quality foraging/aestivation, and unoccupied habitat. Potential breeding habitat is located within the active channel of the San Luis Rey River. High quality foraging/aestivation habitat is found off-site in the lower flood prone areas of the San Luis Rey River dominated by riparian vegetation. Low quality foraging/aestivation habitat is located in the upper flood prone areas of the San Luis Rey River dominated by citrus/avocado groves. The groves have suitable soil conditions, irrigation, and detritus layer for burrowing and localized aestivation. The portion of the on-site area south of the former alignment of SR-76 is low-quality foraging/aestivation habitat. As shown in Figure 3.1-4, unoccupied habitat is located north of the former alignment of SR-76 and includes the majority of the site. The unoccupied habitat is well within one km from known arroyo toad breeding locations.

Low quality habitat extends between 600 and 1,300 feet from the San Luis Rey River north to SR-76.

Excluded Essential Habitat, but no Critical Habitat, for this species has been designated along the San Luis Rey River and its tributaries (Figure 3.1-4). Near the Project Site, it extends into Horse Ranch Creek and onto the Project Site in the southern and western portions. Although the Project Site contains about 8.2 acres of excluded Essential Habitat, only about 3.5 acres was suitable for seasonal arroyo toad use prior to construction of the new SR-76 alignment, including the orange groves at the southern tip of the Project Site south of the former SR-76 alignment. Current construction of the new SR-76 alignment has created a permanent barrier to arroyo toad access to the Project Site.

In San Diego County, the arroyo toad is found along most major drainages, although it has been extirpated from some and seriously depleted from others. The arroyo toad continues to occur along most of the length of the San Luis Rey River and its range within San Diego County closely parallels that of the least Bell's vireo.

**California Gnatcatcher (*Polioptila californica*)**

STATUS: Federal Threatened, Group 1.

HABITAT: Principally, the various associations of coastal sage scrub (Venturan, Riversidean, Diegan, Maritime, etc.), but also in chamise chaparral, especially where it occurs in association with sage scrub. Occasionally utilizes other habitats, such as riparian scrub, riparian woodland, and even grassland, outside the breeding season.

DISTRIBUTION: Southeastern Ventura County (locally), Los Angeles County (locally, primarily in the southern portion), extreme southwestern San Bernardino County, western Riverside County, Orange County, and San Diego County west of the mountains. Also found throughout much of Baja California.

OCCURRENCE ON-SITE: Not detected on-site during focused surveys conducted in 2003-2004, 2005, 2006, and 2008. An individual (unpaired) gnatcatcher was detected in the northwestern corner of the site in 2007.

OCCURRENCE OFF-SITE: One individual gnatcatcher was detected just off-site in a narrow corridor of riparian scrub in 2004. Two individual gnatcatchers were observed in the vicinity of proposed off-site improvements along Pankey Road in 2007.

OPTIMAL SURVEY PERIOD: Year-round, but mid-February through August for breeding.

Protocol-level surveys for California gnatcatcher conducted on and immediately adjacent to the Project Site in 2003-2004, 2005, 2006, and 2008 did not detect this species in suitable coastal sage scrub habitat. One individual was found just off-site in a narrow corridor of riparian scrub in 2004. The small drainage corridor is surrounded by pastureland and citrus/avocado groves and the closest coastal sage scrub habitat is approximately 1,500 feet away. As this individual was not in appropriate breeding habitat, it is presumed to have been a non-resident, possibly dispersing individual. One breeding pair was located approximately 0.4 mile northwest of the Project Site in Pankey

Wash just east of I-15. During the 2007 protocol surveys, one male California gnatcatcher was observed in the northwestern corner of the Project Site. Also, during these surveys two male gnatcatchers were observed in coastal sage scrub along Pankey Road in the vicinity of the proposed Pankey Road and water pipeline off-site improvements (Figure 3.1-5).

Based on the quality and maturity of the coastal sage scrub on the Project Site and the presence of a male California gnatcatcher in 2007, all coastal sage scrub on the Project Site is assumed to be suitable and occupied California gnatcatcher habitat. Similarly, the adjacent coastal sage scrub to the north of the Project Site and east of I-15 is considered occupied gnatcatcher habitat due to the presence of two males observed along Pankey Road. The occupied habitat includes coastal sage scrub associated with the Pankey Road widening, Pala Mesa Heights Drive, Horse Ranch Creek Road and water line off-site improvements and coastal sage scrub on the site. No California gnatcatchers have been observed south of the Project Site or west of I-15. This area is designated as unoccupied California gnatcatcher habitat. The unoccupied habitat includes coastal sage scrub associated with Pala Mesa Drive, a portion of Horse Ranch Creek Road, water lines, and off-site grading along the southern site edge.

Critical Habitat for the California gnatcatcher has been designated throughout much of the region and includes all but the central portion of the Project Site (USFWS 2007b). There are approximately 166.5 acres of Critical Habitat on-site that includes 84.7 acres of Critical Habitat considered Primary Constituent Elements (PCEs) for the California gnatcatcher site (Figure 3.1-4). There are also 2.1 acres of suitable gnatcatcher habitat on-site that are not within the boundaries of the Designated Critical Habitat. Off-site improvement areas with PCEs include Horse Ranch Creek Road, Pala Mesa Drive, and water transmission lines.

Suitable breeding habitat for the California gnatcatcher occurs north, south, and east of the Project Site. However, densities of gnatcatchers in the vicinity of the site are low. The California gnatcatcher is found in higher densities farther north in the Temecula area of extreme southwestern Riverside County, west and south of the town of Bonsall toward the coast and south County, and east of the site in the vicinity of the Pala Indian Reservation. According to the USFWS's 2003 proposed revised Critical Habitat designation for California gnatcatcher, there is a core population of gnatcatcher on the Pala Indian Reservation and a regional north-south corridor through the reservation (USFWS 2003). The Pala Indian Reservation is about seven miles east of the Project Site.

#### **Least Bell's Vireo (*Vireo bellii pusillus*)**

**STATUS:** Federal Endangered; California Endangered, Group 1.

**HABITAT:** Riparian scrub and riparian woodland along river and stream courses, preferring dense willow thickets for nesting.

**DISTRIBUTION:** Summer season resident of central and southern California, and northwest Baja California. Additional populations are in the Owens Valley, Death Valley, and along the lower Colorado River.

**OCCURRENCE ON-SITE:** Not detected on-site.

**OCCURRENCE OFF-SITE:** In 2007, six least Bell's vireos were located in southern arroyo willow riparian forest along the San Luis Rey River south of the site, and seven other individuals were located in similar habitat along Horse Ranch Creek in the vicinity of the proposed Pala Mesa Drive. In 2008, five vireos were observed along Horse Ranch Creek.

**OPTIMAL SURVEY PERIOD:** April to August.

The least Bell's vireo occurs along the San Luis Rey River from I-15 to the coast and along the Santa Margarita River. The Santa Margarita River's closest approach to the Project Site is six miles to the northwest. Farther from the Project Site, the species has been found breeding primarily along the San Dieguito River 20-25 miles to the south, with scattered pairs found elsewhere in the county along smaller drainages. In 2007, six least Bell's vireos were located in southern arroyo willow riparian forest along the San Luis Rey River south of the Project Site, and seven other individuals were located in similar habitat along Horse Ranch Creek in the vicinity of the proposed Pala Mesa Drive (Figure 3.1-5). In 2008, five vireos were observed along Horse Ranch Creek in similar locations as found in 2007. All vireos have been observed east of I-15. Least Bell's vireo has not been observed on the site and no suitable habitat for this species is present within the site boundaries.

Based on field observations supplemented by CNDDB records the willow riparian forest vegetation associated with Horse Ranch Creek and the San Luis Rey River is assumed occupied least Bell's vireo habitat. This area includes the off-site improvements for Pala Mesa Drive, Horse Ranch Creek Road, and grading along the southwestern Project Site edge. The riparian vegetation along SR-76 is suitable vireo habitat and is also assumed to be occupied.

The extreme southern portion of the Project Site contains 3.13 acres of Designated Critical Habitat that do not contain any PCE's for least Bell's vireo and are not suitable habitat or habitat occupied by this species.

**Southwestern Willow Flycatcher** (*Empidonax traillii extimus*)

**STATUS:** Federal Endangered; California Endangered, Group 1.

**HABITAT:** Riparian scrub and riparian woodland along river and stream courses, preferring dense thickets for nesting. These can include vegetation dominated by willows, tamarisk, and even coast live oak.

**DISTRIBUTION:** Summer season resident of central and southern California, as well as the lower Colorado River.

**OCCURRENCE ON-SITE:** Not detected on-site.

**OCCURRENCE OFF-SITE:** Not detected in the vicinity of off-site improvement areas.

**OPTIMAL SURVEY PERIOD:** May to July.

Recent CNDDB data show four known occurrences of southwestern willow flycatcher in the vicinity of the Project Site from 2000, 2002, and 2006. The nearest record is less



than one mile away from the Project Site along the San Luis Rey River (Figure 3.1-5). USFWS species data show eleven known occurrences of southwestern willow flycatcher within six miles of the Project Site between 2000 and 2004. One observation was located immediately south of the Project Site across SR-76 and three other flycatcher observations were less than one-half mile upstream of the Project Site. No southwestern willow flycatchers were observed on or off-site during protocol presence-absence surveys conducted in 2007 and 2008.

No suitable habitat for this species is present on the Project Site. Suitable, but unoccupied southwestern willow flycatcher habitat occurs in the willow riparian forest vegetation associated with Horse Ranch Creek and the San Luis Rey River. This area includes the off-site improvements for Pala Mesa Drive, Horse Ranch Creek Road and grading along the southwestern Project Site edge. No occupied southwestern willow flycatcher habitat is present on the Project Site or in any off-site improvement area.

Designated Critical Habitat for this species occurs along the San Luis Rey River and its tributaries and is not present on the Project Site or within off-site improvement areas. Of the relatively few breeding localities of southwestern willow flycatcher in San Diego County, most have been along the Santa Margarita River. Fewer breeding locations have been documented along the San Luis Rey River, and most of these have been downstream from the site. In western San Diego County the species is also found in the vicinity of Chula Vista near the Mexican border.

#### *Non-listed Special Status Wildlife Species Observed on the Site*

In addition to the listed species described above, there are 21 species that were detected on the Project Site or could be impacted by off-site improvements. These 21 species are special status species, but are not agency listed:

1. Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
2. Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
3. Northern harrier (*Circus cyaneus*)
4. Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)
5. Coastal Western whiptail (*Aspidoscelis tigris stejnegeri*)
6. San Diego ringneck snake (*Diadophis punctatus similis*)
7. Coronado western skink (*Eumeces skiltonianus interparietalis*)
8. Western spadefoot (*Spea hammondi*)
9. San Diego coast horned lizard (*Phrynosoma coronatum blainvillei*)
10. Northern red rattlesnake (*Crotalus ruber ruber*)
11. Cooper's hawk (*Accipiter cooperi*)
12. Yellow warbler (*Dendroica petechia*)
13. Yellow-breasted chat (*Icteria virens*)
14. White-faced ibis (*Plegadis chihi*)
15. Western bluebird (*Sialia mexicana*)
16. Two-striped garter snake (*Thamnophis hammondi*)
17. Green heron (*Butorides virescens*)
18. Turkey Vulture (*Cathartes aura*)
19. Red-shouldered hawk (*Buteo lineatus elegans*)
20. White-tailed kite (*Elanus leucurus*)
21. Barn owl (*Tyto alba pratincola*)

*Sensitive Wildlife Species Potentially Occurring But Not Observed On-site*

Table IV in Appendix F-2 provides a list of the sensitive wildlife species observed on the Project Site or in and around off-site improvement areas, as well as other sensitive wildlife potentially occurring but not observed on-site. Habitats and conditions that may be appropriate for some of these species to occur on-site are also indicated in Table IV. Based on a review of the 2008 CNDDDB records for the USGS Temecula, Pechanga, Bonsall, and Pala Quadrangles and USFWS federal species occurrence data, 40 species of special status animals were detected in the vicinity of the Project Site or near off-site improvement areas. Species occurrence data from the USFWS are presented on Figure 3.1-3 and CNDDDB records are presented on Figure 3.1-5.

Wildlife Movement and Habitat Connectivity

Three wildlife movement corridors were observed on or near the Project Site and are illustrated on Figure 3.1-6. Movement paths or corridors were determined based on topography, habitat, wildlife sightings, and scat/tracks. The local I-15 and SR-76 highways act as barriers to wildlife movement in the area to the south and west of the Project Site. The Project Site is connected to a large area of natural vegetation associated with Monserate Mountain to the north.

Corridor 1: This north-south corridor contains upland coastal sage scrub occurring along the southern ridgeline of Monserate Mountain along the eastern and northern portions of the site. The corridor is approximately 600 to 700 feet wide within the site and runs the length of the eastern boundary. The corridor widens to the north connecting coastal sage scrub covered hills to the north with scrub covered hills to the south, SR-76, and further south to the San Luis Rey River. Coyotes and mule deer scat were observed along this ridgeline and its eastern slopes. This corridor is of moderate value to local and regional wildlife movement. Corridor 1 is an important resource for movement of species, providing access to the northern and southern areas that remain as habitable space for wildlife and vegetation communities. However, the corridor is constrained by steep slopes, narrow ridgelines, existing agriculture and residential areas. In addition, the proximity of the SR-76 creates a permanent southern terminus for regional wildlife movement limiting connectivity to regional open space areas.

Corridor 2: This corridor follows the San Luis Rey River drainage and associated riparian scrub immediately south of the Project Site. The drainage connects many different habitats along its east-west course. The corridor is approximately 200 to 400 feet wide and runs the length of the San Luis Rey River.

Corridor 3: This north-south corridor follows the slopes and ridgeline to the east of the Project Site on the western side of Rice Canyon. The disturbed coastal sage scrub and chaparral slopes and ridges connect the mountains and smaller slot canyons to the north with Couser Canyon and the San Luis Rey River to the south. The corridor varies greatly from 500 to 2,500 feet wide and runs the length of the local hills and canyons. Rice

Canyon itself is developed with agriculture and residences that have fenced off most of the access through the bottom of the canyon.

The riparian forest east of I-15 from Stewart Canyon to the north through Horse Ranch Creek to the San Luis Rey River and Keys Canyon to the south may be considered a “stepping stone” or “habitat island” for riparian and migratory birds. This area was not described as a corridor based on the fact that large or mid-size mammal use of this area was not observed and, based on existing obstructions (fences and roads), is not expected. Additionally, SR-76 already acts as a barrier to wildlife movement southward towards the San Luis Rey River.

### **3.1.2 Guidelines for the Determination of Significance**

For the purpose of the EIR, the determination of significance is based on the County’s Guidelines for Determination of Significance, Biological Resources, adopted September 26, 2006.

A project will have a significant adverse environmental effect related to biology if a project-related component results in any of the following:

#### ***Special Status Species***

1. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.
2. The project would impact the regional long-term survival of a County Group A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern.
3. The project would impact the regional long-term survival of a County Group C or D plant species or a County Group II animal species.
4. The project would impact arroyo toad aestivation or breeding habitat.
5. The project would impact golden eagle habitat.
6. The project would result in a loss of functional foraging habitat for raptors.
7. The project would increase the noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.
8. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
9. The project would increase human access or predation or competition from domestic animals, pests or exotic species to levels that would adversely affect sensitive species.
10. The project would impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification, and/or noise generating activities such as construction.

### ***Riparian Habitat and Sensitive Natural Communities***

11. Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.
12. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by ACOE, CDFG, and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.
13. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of three feet or more from historical low groundwater levels.
14. The project would increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats.
15. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

### ***Jurisdictional Waters including Wetlands***

The format of the biology reports is based on the CEQA Guidelines, which discusses riparian and sensitive habitats in a separate section from wetlands. The Guidelines of Significance for jurisdictional wetlands and waterways are based on the Guidelines of Significance for riparian habitat listed as numbers 11 through 15 above.

### ***Wildlife Movement***

16. The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
17. The project would substantially interfere with a local or regional wildlife corridor or linkage.
18. The project would create artificial wildlife corridors that do not follow natural movement patterns.
19. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
20. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses to it, and placement of barriers in the movement path.
21. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.

***Local Policies, Ordinances, and Adopted Plans***

22. For lands outside of the MSCP, the project would impact coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
23. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
24. The project will impact wetlands or sensitive habitat lands as outlined in the RPO.
25. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
26. The project does not conform to the goals and requirements as outlined in any applicable HCP, Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar planning effort.
27. For lands within the MSCP, the project would not minimize impacts to Biological Resource Core Areas, as defined in the Biological Mitigation Ordinance (BMO).
28. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
29. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
30. The project does not define impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
31. The project would reduce the likelihood of survival and recovery of listed species in the wild.
32. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
33. The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

**3.1.3 Analysis of Project Effects and Determination as to Significance**

The anticipated on-site project effects associated with implementation of the Proposed Project and off-site improvements are summarized below. Following this generalized discussion of on- and off-site impacts is a more detailed analysis of Special Status Species; Riparian Habitat and Sensitive Natural Communities; Jurisdictional Wetlands; Wildlife Movement Corridors; and Local Plans and Policies. These topical discussions follow the same order of the Guidelines for the Determination of Significance listed in Section 3.1.2 and the Biological Technical Report (see Appendix F-1).

All impacts for the Proposed Project have been classified as permanent, temporary or impact neutral as described below.

- A permanent impact is defined as an impact that will remove vegetation and will not be restored or revegetated. Grading, brush management, and installation of structures are examples of permanent impacts.

- A temporary impact is defined as an impact that will remove or disturb vegetation and will be restored or revegetated to its original condition with the same species or vegetation communities as the resources being impacted and no further mitigation is required. Additionally, the restored/revegetated area will not be used towards mitigation credit. On-site temporary impacts include trenching and construction of a water main between the water tanks and residential area in the eastern portion of the site as shown on Figure 3.1-7a.
- Impact neutral areas, in accordance with County Guidelines of Significance, are not considered removal areas, but cannot be credited toward mitigation requirements. The impact neutral area on the Project Site is confined by the water tanks and access road separating it from the majority of the preserved open space.

### ***On-site Impacts***

Development of the Proposed Project would have adverse impacts on various biological resources present on the Project Site. The Proposed Project would develop approximately 217.8 acres of the site for residential and associated uses, including parks, recreational trails, fire access road, and an elementary school. This area includes a 100-foot Limited Building Zone Easement, brush management zone, and water tanks. The Proposed Project will include a WWTP and wet weather ponds in the southern portion of the Project Site.

Vegetation communities affected by grading on the Project Site include coastal sage scrub, disturbed coastal sage scrub, southern mixed chaparral, coast live oak woodland, mixed willow/mule fat scrub along with annual grassland, agriculture, pastureland, open water, non-native trees and disturbed/developed areas. The anticipated on-site impacts to vegetation communities are shown on Figure 3.1-7a-c and listed in Table 3.1-2.

As described further below, implementation of the Proposed Project would result in direct and indirect impacts to potentially occupied habitat of two federal listed wildlife species; California gnatcatcher (threatened) and arroyo toad (endangered). Proposed grading would result in the removal of approximately 12.6 acres of occupied habitat for California gnatcatcher. On-site impacts also include permanent impacts to 0.83 acre of ACOE jurisdictional waters and 0.93 acres of CDFG jurisdictional waters (GLA 2009).

### ***Off-Site Impacts***

Proposed off-site improvements including grading, road construction and improvements and the extension of water and wastewater transmission lines would result in impacts to biological resources. Specifically, road improvements are proposed for Pala Mesa Drive, Pankey Road, Pala Mesa Heights Drive, Horse Ranch Creek Road, a residential connection road, and water tank access road. The extension of water and wastewater lines associated with the preferred utility alignment and connection to the Second San Diego Aqueduct, located west of I-15, would include the placement of transmission lines within the existing or improved roadways identified above and discussed below. Should this alignment be selected, disturbance of additional areas would not be required. Widening and realignment of portions of SR-76 has already been permitted separately by different applicants. As discussed in detail below, development of off-site improvement areas would result in the permanent removal of approximately 64.6 acres

of natural vegetation communities in addition to temporary construction-related impacts. Potential impacts associated with off-site improvements are listed in Tables 3.1-3 and 3.1-4 and shown on Figures 3.1-7 a, b, and c. These tables also identify which improvements may affect federally listed species.

Specific off-site improvements associated with Horse Ranch Creek Road, Pala Mesa Heights Drive, Pankey Road, and the placement of water/ wastewater transmission lines within the roadways or right of ways, would remove 0.9 acres of occupied California gnatcatcher habitat. Another 1.0 acres of unoccupied gnatcatcher habitat would be removed in off-site improvements associated with Pala Mesa Drive, a portion of Horse Ranch Creek Road, the water and wastewater lines and grading along the southern edge of the Project Site. It is anticipated that 3.7 acres of suitable least Bell's vireo habitat (southern willow scrub and southern arroyo willow riparian forest) may be lost due to the construction/widening of Horse Ranch Creek Road, Pala Mesa Drive, and off-site grading along the southern edge of the Project Site.

The off-site development of the Proposed Project will result in permanent impacts to 2.29 acres of ACOE, CDFG jurisdictional waters and RPO wetlands and temporary impacts to 2.04 acres of ACOE, CDFG and RPO wetlands jurisdiction off-site. (GLA 2009).

### ***Special Status Species (Guidelines 1 through 10)***

A significant impact would occur if the project adversely affects special status plant or animal species.

#### **Special Status Plant Species (Guidelines 2 & 3)**

No special status plant species have been detected on the Project Site. Therefore, no direct or indirect impacts would be expected to special status, threatened, or endangered plant species.

#### **Threatened or Endangered Wildlife Species (Guideline 1)**

The Project Site is located in the vicinity of known occurrences of the arroyo toad, California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. Potential direct and indirect impacts associated with on and off-site improvements are described in the following paragraphs. In addition, this section describes potential project effects to Designated Critical Habitat for the California gnatcatcher, Designated Critical Habitat for the least Bell's vireo and Proposed Critical Habitat for the southwestern willow flycatcher.

#### **Arroyo Toad (Guidelines 1 and 4)**

One arroyo toad was located on the Project Site using low quality foraging and aestivation habitat south of the former alignment of the SR-76 prior to the current realignment construction. Road construction has created a barrier to arroyo toad movement from the San Luis Rey River to the low quality aestivation habitat in the southernmost portion of the site. The permanent barrier between the south side of SR-76 and the Project Site eliminates any potential use of the Project Site by arroyo toad.

### *Direct Impacts*

The Proposed Project will not have any permanent or temporary direct effects on arroyo toad. Likewise, no Critical Habitat for the arroyo toad will be impacted by the Proposed Project. Therefore, direct impacts to arroyo toads and their habitat are **less than significant**.

### *Indirect Impacts*

Construction activities in the vicinity of arroyo toads and their habitat may result in indirect impacts. Indirect impacts may include increased nighttime lighting, erosion, and debris or construction equipment within identified habitat. Additionally, all drainage from proposed roads and structures associated with the Proposed Project would flow into a storm drain system and detention basins. Any changes in the quantity or quality of runoff from the Project Site that would increase sediment load in nearby occupied habitat could also result in indirect impacts.

Therefore, indirect impacts to arroyo toads and their habitat associated with construction activities and/or debris and polluted water entering into the storm drain system would be considered a **significant impact (BR-1)**.

### California Gnatcatcher (Guidelines 1, 7, and 9)

In 2007, one California gnatcatcher was observed on the site in the northern patch of coastal sage scrub and two other individuals were observed near the Pankey Road and water line off-site improvement areas. Based on the quality and maturity of the coastal sage scrub on the site and the presence of the male California gnatcatcher in 2007 all coastal sage scrub on the site is, assumed to be suitable and occupied California gnatcatcher habitat.

### *Direct Impacts*

Direct impacts to California gnatcatcher habitat include both permanent and temporary impacts to coastal sage scrub vegetation.

Permanent impacts include approximately 12.6 acres on-site and 0.9 acres in off-site improvement areas (Horse Ranch Creek Road, Pala Mesa Heights Drive, Pankey Road, and water lines), totaling 13.5 acres.

In addition, 1.0 acre of unoccupied coastal sage scrub and disturbed coastal sage scrub would be removed in off-site improvement areas for Pala Mesa Drive, a portion of Horse Ranch Creek Road, water lines, and grading along the site edge. No California gnatcatchers have been observed south of the site or west of I-15 in these off-site improvement areas and are therefore considered unoccupied. No California gnatcatchers have been observed within these specific improvement areas. Overall, Proposed Project impacts total 14.5 acres of occupied and unoccupied habitat due to permanent removal of habitat.

Additionally, there would be temporary on-site impacts to 0.2 acre of presumed occupied California gnatcatcher habitat and temporary off-site impacts to 0.1 acre of occupied and



unoccupied habitat. These temporary impacts would result specifically from improvements to Pala Mesa Heights Drive.

Approximately 34.2 acres of Designated Critical Habitat for the California gnatcatcher would be removed through project grading. Within the on-site grading area, approximately 11.6 acres of Critical Habitat consists of habitat containing Primary Constituent Elements (PCEs) for this species (i.e. coastal sage scrub and disturbed coastal sage scrub vegetation). The remaining 22.6 acres consist of agricultural areas, annual grasslands, and disturbed areas and do not contain PCEs for this species. Off-site, 40.1 acres of Critical Habitat are within proposed off-site improvement areas of which 1.9 acres consists of coastal sage scrub vegetation. A total of 13.5 acres of Designated Critical Habitat that contain PCEs on and off-site will be impacted by the project. These 13.5 acres are included within the 14.5 acres of identified impacts to California gnatcatcher habitat; the remaining impacts to 1.0 acre of gnatcatcher habitat are outside the Critical Habitat boundaries.

Permanent removal of 14.5 acres of occupied, unoccupied and disturbed coastal sage scrub and temporary impact to 0.3 of occupied, unoccupied and disturbed coastal sage scrub would be considered a **significant impact (BR-2)**.

#### *Indirect Impacts*

Construction activities and increased human presence in the vicinity of California gnatcatchers and their habitat may result in indirect impacts. Indirect impacts may include increased noise, increased nighttime lighting, erosion, and debris or construction equipment in the preserved habitat. Public access into the proposed open space through existing trails may result in people and pets entering the suitable habitat areas. These edge effects represent a **significant impact (BR-3)**.

#### *Least Bell's Vireo (Guidelines 1 and 7)*

Least Bell's vireos have been observed in several locations along the San Luis Rey River and Horse Ranch Creek in the vicinity of the Project Site. No least Bell's vireo habitat occurs on-site.

#### *Direct Impacts*

No direct on-site impacts to least Bell's vireo are anticipated as a result of the Proposed Project.

Off-site impacts would result due to roadway improvements. It is anticipated that 3.7 acres of occupied southern willow scrub and southern arroyo willow riparian forest habitat would be removed by the construction/widening of Horse Ranch Creek Road, Pala Mesa Drive, and grading along the Project Site edges just off-site.

Temporary impacts to 2.2 acres of suitable habitat for least Bell's vireo would occur due to grading along the Project Site edge, Horse Ranch Creek Road and Pala Mesa Drive construction.

No on or off-site improvements are anticipated to adversely affect the least Bell's vireo Critical Habitat with PCEs. Impacts to 3.1 acres of least Bell's vireo Critical Habitat consist of non-native trees and pasture, which are not PCEs for this species.

The permanent removal of 3.7 acres of suitable habitat and temporary impacts to 2.2 acres of suitable habitat for least Bells' vireo would be considered a **significant impact (BR-4)**.

*Indirect Impacts*

Construction activities in the vicinity of least Bell's vireos and their habitat may result in indirect impacts. Indirect impacts may include increased noise, increased nighttime lighting, erosion, and debris or construction equipment in the preserved habitat. These edge effects are considered a **significant impact (BR-5)**.

Southwestern Willow Flycatcher (Guidelines 1 and 7)

No southwestern willow flycatchers have been detected on-site or in the vicinity of off-site improvement areas.

*Direct Impacts*

No on-site project impacts would have any direct impacts on southwestern willow flycatcher and would not remove any suitable habitat for this species.

Suitable, but unoccupied, southwestern willow flycatcher habitat would be removed as a result of off-site improvements including the construction/widening of Pala Mesa Drive and Horse Ranch Creek Road. These impacts will cover the same permanent impacts associated with removal of least Bell's vireo habitat and include 3.7 acres of southern arroyo willow riparian forest and southern willow scrub.

Temporary impacts to 2.2 acres of suitable habitat would occur due to grading along the edge of the Project Site and the construction/improvement of Horse Ranch Creek Road and Pala Mesa Drive.

No other on or off-site improvements related to this project are anticipated to adversely affect the southwestern willow flycatcher Critical Habitat.

The permanent removal of 3.7 acres of suitable habitat and temporary impacts to 2.2 acres of suitable habitat for southwestern willow flycatcher would be considered a **significant impact (BR-6)**.

*Indirect Impacts*

Construction activities in the vicinity of southwestern willow flycatchers and their habitat may result in indirect impacts. Indirect impacts may include increased noise, increased nighttime lighting, erosion, and debris or construction equipment in the preserved habitat. These edge effects are considered a **significant impact (BR-7)**.

Special Status Wildlife Species (Guidelines 2, 3, and 6)

Fourteen special status wildlife species have been observed on-site and would be adversely affected by development of the Proposed Project. The species recorded on-site include Belding's orange-throated whiptail, coastal western whiptail, San Diego coast horned lizard, Coronado western skink, San Diego ringneck snake, northern red rattlesnake, western spadefoot toad, barn owl, northwestern San Diego pocket mouse, and western bluebird (San Diego County Group 2) and two-striped garter snake, turkey vulture, northern harrier, and southern California rufous-crowned sparrow (San Diego County Group 1). These species are all California Species of Special Concern except for barn owl, western bluebird, and turkey vulture and are found in the scrub and grassland areas on-site. Off-site improvements may also adversely affect an additional seven special status species: green heron, yellow warbler (Group 2); white-faced ibis; Cooper's hawk, red-shouldered hawk, white-tailed kite, and yellow-breasted chat (Group 1).

The scrub and non-native grassland vegetation provides foraging habitat for birds of prey (raptors). Development of the Proposed Project will permanently impact foraging habitat on- and off-site. These impacts include 14.5 acres of coastal sage scrub, 2.2 acres of southern mixed chaparral, 30.2 acres of pasture and 15.3 acres of non-native grassland for a total of 62.2 acres of habitat. Temporary impacts include 0.3 acre coastal sage scrub, 0.2 acre of southern mixed chaparral, and 5.0 acres of pasture and non-native grassland for a total of 5.5 acres of habitat. The overall loss of foraging habitat resulting from development of on- and off-site areas is considered a **significant impact (BR-8)**.

Western spadefoot toads, also listed as a California Species of Special Concern, have been determined to be rare in the region by the USFWS and the County of San Diego, and have been recorded in the orchard and disced agricultural areas on the Project Site. Higher quality habitat for this species occurs off-site to the west and south of the Project Site. Nevertheless, based on the regional scarcity of this species, Proposed Project implementation would result in a **significant impact (BR-9)**.

The 14 special status wildlife species that have been recorded on-site are found within various vegetation communities as follows:

**Coastal sage scrub** provides suitable habitat for Belding's orange-throated whiptail, coastal western whiptail, San Diego coast horned lizard, Coronado western skink, San Diego ringneck snake, northern red rattlesnake, southern California rufous-crowned sparrow, northern harrier, and northwestern San Diego pocket mouse.

**Southern mixed chaparral** provides habitat for coastal western whiptail, San Diego coast horned lizard, Coronado western skink, San Diego ringneck snake, northern red rattlesnake, southern California rufous-crowned sparrow, and northwestern San Diego pocket mouse.

**Non-native grasslands and pastureland** provide habitat for Belding's orange-throated whiptail, coastal western whiptail, Coronado western skink, San Diego ringneck snake, two-striped garter snake, northern harrier, turkey vulture, barn owl, white-tailed kite, and northwestern San Diego pocket mouse.

**Southern arroyo willow riparian forest, willow/mule fat scrub and southern willow scrub** provide habitat for Coronado western skink, San Diego ringneck snake, two-striped garter snake, yellow warbler, yellow breasted chat, green heron, western bluebird, white-faced ibis, white-tailed kite, red-shouldered hawk, and Cooper's hawk.

Development of the Proposed Project, including on- and off-site improvements will permanently impact 14.5 acres of coastal sage scrub, 2.2 acres of chaparral, 30.2 acres of acres of pastureland and 15.3 acres of non-native grassland for a total of 62.2 acres of on- and off-site habitat potentially supporting special status wildlife. Temporary impacts include 0.3 acre of coastal sage scrub, 0.2 acre of chaparral, and 5.0 acres of pastureland and non-native grassland for a total of 5.5 acres of on- and off-site habitat. The overall loss of this habitat supporting special status wildlife represents a **significant impact (BR-10)**.

Impacts to non-native grassland, pastureland, southern arroyo willow riparian forest, willow/mule fat scrub, and southern willow scrub are not anticipated to substantially diminish or threaten the regional distribution of these 14 special status wildlife species.

#### Nesting Birds (Guideline 10)

The Project Site and off-site improvement areas provide habitat for a variety of native bird species including raptors. No nests, including raptor nests, were observed during NRC surveys conducted between 2002 and 2007; however, direct disturbance to the nests of species protected by the Migratory Bird Treaty Act would be a violation of Migratory Bird Treaty Act of 1918. Nests, eggs and individual birds of these species are also protected under Fish and Game Code Section 3503. Therefore, any disruption to protected nesting birds represents a **significant impact (BR-11)**.

#### General Indirect Impacts (Guideline 7)

**Lighting.** External community lighting may have an effect on species near the edge of open space if it is allowed to shine into preserved areas. This represents a **significant impact (BR-12)**.

**Noise.** Noise resulting from implementation of the Proposed Project includes both temporary and permanent noise sources. Proposed Project construction would create new temporary noise sources and daily traffic associated with the completion of the Proposed Project would permanently increase ambient noise levels in the vicinity of habitats potentially occupied by California gnatcatcher, least Bell's vireo, and other avian species. Based on an acoustical study completed by RECON, current noise levels adjacent to the I-15 and SR-76 exceed 60 CNEL near Horse Ranch Creek and the San Luis Rey River. These elevated levels are likely to have habituated many species to "urban" noise. Anticipated changes in noise levels must be interpreted assuming this existing condition. Future projected noise contour lines take into account attenuation from the site topography, vegetation, and proposed buildings. Based on the acoustical study it was determined that future ambient noise projected to be generated by I-15, SR-76, Horse Ranch Creek Road, and Pala Mesa Drive do not exceed 60 CNEL at the open space within the eastern side of the Project Site (See Figure 3.5-3). Impacts to wildlife residing within the open space due to traffic-related noise is **less than significant**.

Construction equipment associated with grading can be expected to generate A-weighted hourly average noise levels between 77 and 91 [dB(A) Leq] at 50 feet from the source (RECON 2009a). With flat-site and hard site conditions the average noise level at 1,800 feet would be approximately hourly 60 dB(A) Leq. Construction of off-site facilities will not use large grading equipment and is not expected to generate average noise levels that would adversely affect sensitive wildlife species.

There is no scientific or incidental evidence that suggests increased noise levels (i.e. 60 dB) is a biologically relevant threshold for altering or interrupting California gnatcatcher behavior (Awbrey 1993; 1995; Attwood and Bontrager 2001). Therefore, impacts to breeding, nesting, or foraging of California gnatcatchers birds resulting from Proposed Project construction or increased traffic is **less than significant**.

Increased noise levels may adversely affect breeding and nesting least Bell's vireo. This **significant** impact has been previously discussed and identified as **BR-5**.

#### Impacts related to the Regional Long-term Survival of County Group II Species (Guideline 3)

As discussed above and identified as **BR-9, BR-10, BR-11 and BR-12**, the Proposed Project would result in a **significant** impact to a County Group II species.

#### Core Wildlife Areas, and Golden Eagle Habitat (Guidelines of Significance 5 and 8)

The Proposed Project would not result in significant impacts to core wildlife areas or Golden Eagle habitat for the following reasons:

- No golden eagles are on site or within 4,000 feet of the site.
- No core wildlife areas are present on the Project Site, within the Proposed Project footprint, or in the vicinity of off-site improvement areas.

#### ***Riparian Habitat and Sensitive Natural Communities (Guidelines 11 through 15)***

A significant impact would occur if the project would adversely affect riparian habitat and sensitive natural communities. Guidelines 11 through 15 were used to determine the significance of the project on riparian habitat and/or sensitive natural communities. Jurisdictional wetlands would utilize the same Guidelines, particularly Guideline 12, but are analyzed in their own section (below). Development of the Project Site would result in impacts (both on- and off-site) to a variety of vegetation communities as discussed below. Table 3.1-5 lists the on- and off-site impact acreage totals for all of the vegetation communities. Mitigation for direct impacts as discussed in detail below, consisting of the preservation of vegetation per the County mitigation ratios is also listed in Table 3.1-5.

#### Coastal Sage Scrub and Disturbed Coastal Sage Scrub (Guideline 11)

Coastal sage scrub vegetation covers approximately 87.1 acres (22.4 percent) of the Project Site, located at the edges of citrus and avocado orchards, providing habitat suitable to support California gnatcatchers. No other federal or State-listed threatened or endangered plant or wildlife species are known to use this habitat on the Project Site. The Proposed Project would permanently remove approximately 12.6 acres on-site and

approximately 1.9 acres off-site, totaling impacts to 14.5 acres of coastal sage scrub. Temporary impacts include 0.2 acre on-site and 0.1 acre off-site. Removal of coastal sage scrub/disturbed coastal sage scrub is considered a **significant impact (BR-13)**.

Southern Mixed Chaparral (Guideline 11)

Southern mixed chaparral vegetation covers approximately 19.6 acres (5.0 percent) of the Project Site. The Proposed Project would remove approximately 2.2 acres on-site. Removal of southern mixed chaparral is considered a **significant impact (BR-14)**.

Coast Live Oak Woodland (Guideline 11)

Coast live oak woodland covers approximately 1.7 acres (0.4 percent) of the Project Site. The Proposed Project would remove approximately 0.1 acre on-site and approximately 0.2 acre off-site, for a total of 0.3 acre. Removal of coast live oak woodland is considered a **significant impact (BR-15)**.

The project will also remove 0.4 acre of the 50-foot oak root zone on-site and 1.1 acres off-site for a total of 1.5 acres. Many of these trees are individual oak trees located within the coastal sage scrub and chaparral. These 1.5 acres have already been accounted for with impacts to coastal sage scrub, chaparral, and disturbed impacts.

Non-native Grassland (Guideline 11)

Non-native (annual) grassland vegetation covers approximately 31.9 acres (8.2 percent) of the Project Site. The Proposed Project would remove approximately 9.9 acres on-site and approximately 5.4 acres off-site for a total of 15.3 acres. Temporary impacts include less than 0.1 acre onsite and 2.1 acres off-site. Removal of non-native grassland is considered a **significant impact (BR-16)**.

Agriculture (Guideline 11)

Agricultural areas cover approximately 209.9 acres (53.9 percent) of the Project Site. The Proposed Project would remove approximately 160.6 acres on-site and approximately 3.8 acres off-site for a total of 164.4 acres. Temporary impacts include 0.3 acre on-site and 1.4 acres off-site. Biological impacts related to the removal of agricultural lands would be **less than significant**.

Non-native Trees (Guideline 11)

Non-native trees cover approximately 8.3 acres (2.1 percent) of the Project Site. The Proposed Project would remove 8.1 acres on-site and 1.0 acres off-site for a total of 9.1 acres. Temporary impacts would include 0.2 acre off-site. Impacts associated with the removal of non-native trees would be **less than significant**.

Open Water (Guideline 11)

The man-made open water ponds cover approximately 0.7 acre of the Project Site. The Proposed Project would remove the 0.7 acre on-site and no acres off-site. The vegetation surrounding these open water features is not comprised of a distinct vegetation type or plant community and is not delineated as jurisdictional wetlands (GLA

2007). Impacts associated with the removal of these open water ponds would be **less than significant**.

#### Pastureland (Guideline 11)

Pastureland areas cover approximately 1.5 acres (0.4 percent) of the Project Site. Proposed development would result in the removal of approximately 1.5 acres on-site and 28.7 acres off-site for a total of 30.2 acres. Temporary impacts include 2.8 acres off-site. The pasture land is composed of non-native grasses and has a similar habitat value as non-native grassland. Removal of this vegetation community is considered a **significant impact (BR-17)**.

#### Disturbed and Developed

The disturbed and developed areas cover approximately 28.7 acres of the Project Site. The Proposed Project would remove approximately 22.2 acres on-site, and 19.5 acres off-site. The Proposed Project includes 5.9 miles of multi-use trails (hiking and horseback riding). Existing dirt roads located within the proposed natural and agricultural open space will contribute to this trail system. Temporary impacts include less than 0.1 acre on-site and 0.3 acre off-site. Impacts associated with removal of these disturbed areas would be **less than significant**.

#### Wetland Vegetation (Guideline 12)

On-site wetland vegetation includes less than 0.1 acre of isolated willow/mule fat scrub. This area exists due to runoff from adjacent agricultural operations and would cease to be a wetland if these agricultural activities would cease; however, the Proposed Project would remove all of the willow/mule fat scrub. Off-site improvement areas would include permanent impacts to 0.95 acre of southern willow scrub, 2.8 acres of southern arroyo willow riparian forest and 0.3 acre of freshwater marsh.. These impacts are a result of construction/improvement of Pala Mesa Drive, grading along the edge of the Project Site, and construction of Horse Ranch Creek Road and would result in permanent impacts to the riparian vegetation surrounding Horse Ranch Creek. Total on- and off-site permanent impacts to wetland vegetation would be 4.1 acres.

Temporary, impacts due to Pala Mesa Drive, Horse Ranch Creek Road, and grading along the edge of the Project Site would include less than 1.0 acre of southern willow scrub and 2.1 acres of southern arroyo willow riparian forest.

Permanent impacts to 4.1 acres of riparian/wetland vegetation (willow/mule fat scrub, southern willow scrub, southern arroyo willow riparian forest and freshwater marsh) on- and 3.1 acres (southern willow scrub and southern arroyo willow riparian forest) off-site is considered a **significant impact (BR-18)**.

#### Impacts to Sensitive Habitat due to Use of Groundwater (Guidelines 13)

The Proposed Project would not draw down the groundwater table to the detriment of groundwater-dependent habitat. Recycled water will be the primary source for irrigating the retained on-site groves; however, groundwater may be utilized in the event of a dry season. This will not result in an increase in the groundwater table above existing consumption levels and impacts will be **less than significant**.

#### Impacts due to Increase Human Access (Guideline 14)

The Proposed Project has been designed to limit human and domestic animal access to sensitive habitats. Public trails in the proposed open space will use existing dirt roads and trails. A paved fire access road, extending northeasterly from Street E to Rice Canyon Road, will provide alternative access for emergency vehicles. Signs and/or fences will be used to deter access into sensitive habitats. Fences or walls will separate residential areas from the proposed open space limiting access by the public and domestic animals. No invasive plant species will be used in the landscaping palette. For these reasons, impacts to sensitive habitat associated with increased human access, or competition from domestic, pest or exotic species is **less than significant**.

#### Impacts due to Failure to Include Adequate Wetland Buffers (Guideline 15)

A 100-foot wetland buffer is designed around the western portion of the Project Site adjacent to willow riparian forest vegetation of Horse Ranch Creek. This proposed open space is intended to provide protection to the existing wetland area located on the adjacent Campus Park project site. The width of the buffer is adequate to protect the riparian forest that has been heavily grazed by cattle. Therefore, impacts to sensitive habitat due to inadequate wetland buffers are **less than significant**.

#### ***Jurisdictional Waters including Wetlands (Guidelines 11 through 15)***

A significant impact would occur if the project would adversely affects jurisdictional wetlands and waterways

#### On-site Impacts

Jurisdictional delineations were conducted on- and off-site. The Jurisdictional Delineations are included in Appendix F-2 of the EIR. The on-site development of the Proposed Project would remove 0.83 acre of ACOE jurisdictional waters, of which 0.14 acre are jurisdictional wetlands as defined by the ACOE; 0.07 acre are ACOE isolated waters, none of which consist of wetlands; and 0.74 are non-wetland waters. The Proposed Project would remove 0.93 acres of CDFG jurisdictional waters, of which 0.34 acre is vegetated riparian habitat and 0.69 is non-wetland waters.

There are no County RPO wetlands on-site. Although the 0.14 acre drainage located in the central portion of the Project Site, as shown on Figure 3.1-7b, supports several riparian vegetation species and hydric soils, this drainage is not considered an RPO wetland. Section 86.602(q)(2)(bb) of the RPO states that lands that have been disturbed by past legal actions, have negligible biologic function and value, and that do not support a substantial or locally important population of wetland dependent species are not considered to be "wetlands". The wetland attributes in this drainage are the result of legal agricultural irrigation runoff, the biological functions and values are negligible, and the area does not support any substantial or locally important wetland dependent species.

A 100-foot wetland buffer is designed around the western portion of the site adjacent to willow riparian forest vegetation of Horse Ranch Creek. As stated above, this proposed open space is intended to provide protection to the existing wetland area located on the



adjacent Campus Park project site. A summary of the on-site jurisdictional wetland impacts is provided in Table 3.1-6.

#### Off-Site Impacts

Off-site improvements associated with the extension of Pala Mesa Drive, and the construction of Horse Ranch Creek Road, would result in permanent impacts to jurisdictional drainages and wetlands (GLA 2009). The delineation report for on-site development includes a portion of Horse Ranch Creek Road, which, since the report, has been redesigned and is now considered off-site. For consistency between the GLA report and current impact analysis, Horse Ranch Creek Road impacts are identified separately from other off-site impacts. A summary of the off-site jurisdictional wetland impacts is provided in Table 3.1-6.

#### Horse Ranch Creek Road Improvements

Construction of the portion of Horse Ranch Creek Road from the southern terminus of Pankey Road to the western boundary of the Project Site will impact 0.15 acre of ACOE jurisdictional wetlands and less than 0.01 ACOE waters. Of the 0.15 acre of impacts to ACOE jurisdictional wetlands: 0.04 acre is a temporary impact and 0.11 acre is a permanent impact.

Horse Ranch Creek Road impacts to CDFG jurisdiction includes 0.15 of vegetated riparian habitat and less than 0.01 acre of unvegetated streambed. Of the 0.15 acre of impacts to CDFG jurisdictional wetlands, 0.04 acre is a temporary impact and 0.11 acre is a permanent impact.

The impacts to RPO wetlands associated with Horse Ranch Creek Road include 0.15 acre of which 0.04 acre are temporary and 0.11 acre are permanent.

#### Remaining Off-site Improvements (excluding Horse Ranch Creek Road)

The remaining off-site improvements for Pala Mesa Drive would temporarily impact 2.0 acres of ACOE jurisdictional wetlands and less than 0.01 acre of ACOE waters and permanently impact 2.18 acres ACOE wetlands and less than 0.01 acre of ACOE waters. The off-site improvements would temporarily impact 2.0 acres of CDFG jurisdiction vegetated riparian habitat and less than 0.01 acre of unvegetated streambed and permanently impact 2.18 acres of CDFG vegetated riparian habitat and less than 0.01 acre of unvegetated streambed. Permanent linear-foot impacts under ACOE and CDFG jurisdiction total 2,246 linear feet.

The off-site improvements would temporarily impact 2.0 acres (83,200 square feet) and permanently impact 2.18 acres of RPO wetlands.

On- and off-site impacts to jurisdictional wetlands totaling 3.12 acres would be considered a **significant** impact (**BR-19**). Temporary impacts to jurisdictional wetlands on- and off-site totaling 2.04 acres impacts would also be considered a **significant** impact (**BR-20**).

### ***Wildlife Movement (Guidelines 16 through 21)***

A significant impact would occur if the project would adversely affect wildlife movement.

Three wildlife movement corridors on or near the Project Site are discussed in Section 3.1.1 above and shown in Figure 3.1-6.

A major portion of Corridor 1 will be preserved in natural open space, allowing for continued use for wildlife movement. A proposed fire access road paved and varying in width from 20' - 24' feet will extend northeasterly from Street E to Rice Canyon Road and will partially follow existing dirt roads that cross Corridor 1 in the northeastern corner of the Project Site. The elevation of the road ranges from approximately 520 at the cul-de-sac to a peak elevation of 740 at the ridge with manufactured slopes, some exceeding 60 feet in height. The fire access road will not create a barrier to wildlife movement as it will not have fences or walls along its edge and will not be elevated significantly above the natural contours of the hillside. Wildlife will be able to move freely across the road to adjacent vegetation to the north and south.

Similarly, the Proposed Project would not adversely affect Corridors 2 and 3. Off-site widening and realignment of SR-76 permitted by other applicants is adjacent to Corridor 2 along the San Luis Rey River. The SR-76 improvements would not result in any physical or visual obstruction to wildlife movement along Corridor 2. No off-site improvements would occur near Corridor 3 in Rice Canyon located east of the project.

As discussed in Section 3.1.1 above, the riparian habitat along Horse Ranch Creek is a stepping stone or habitat island for riparian and migratory birds and a local path for small animal movement, but is not considered a movement corridor. No large wildlife species such as deer are expected to use this drainage due to the extensive barb wire fencing to the north and south and road barriers such as I-15, Horse Ranch Creek Road, and SR-76. The construction of Pala Mesa Drive to the west of the Project Site is south and west of the main drainage of Horse Ranch Creek. The proposed location of the road will not obstruct local small wildlife species travel within the riparian vegetation, prevent access to water sources or foraging habitat, or prevent migratory birds from utilizing the area.

In summary, development of the Project Site and associated off-site improvement areas would not impact regional wildlife movement based on the following:

- The Proposed Project would not prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction. The Proposed Project has been designed to avoid the three mapped wildlife movement corridors in the area. Construction of Pala Mesa Drive will occur south of the main drainage of Horse Ranch Creek to avoid local wildlife and migratory bird movement (Guideline 16).
- The Proposed Project would avoid substantial impacts to areas that are used for wildlife movement through the region. Impacts near Corridor 1 include installation of water tanks and improvements to access roads that are currently adjacent to the corridor. These improvements would not substantially change the structure of the corridor from its current state (Guideline 17). The Proposed Project would not create artificial wildlife corridors. Corridor 2 would not be altered or rerouted. Development of the Project Site would not adversely affect wildlife movement within any movement

areas in upland habitat (e.g., ridgelines) north or east of the property (Corridor 1). Proposed impacts for a water tank site and access road in the eastern portion of the site are not expected to significantly affect the path of Corridor 1. There is currently a large tank and access road in this proposed impact area. New water tanks will be placed where a tank is currently present on the top of the ridgeline above the path of wildlife movement. Large wildlife species such as coyotes have been observed using the existing access road and eastern slope that provide the least path of resistance from this area to Monserate Mountain to the north. Although additional tanks will be placed at the highest point on the ridge in the same area as the existing tank, it should not affect the wildlife movement because they prefer the road and slopes below the existing tank. A portion of the access road south of the tanks will be improved, but will occupy the same approximate area as the existing road. Installation of the water tanks and routine maintenance would be brief and infrequent and are not anticipated to affect wildlife movement near the tank site. These improvements will not cause a barrier to wildlife movement. Past experience has also shown that such limited facilities will not significantly change the visual features of the area and should not affect the movement of large wildlife species. Wildlife would be able to continue using Corridor 1 without altering their current path of travel along the access roads and eastern slope (Guideline 18).

- The Proposed Project has been designed to reduce noise and nighttime lighting to levels that will not significantly impact wildlife behavior. Lighting will be directed away from the surrounding habitat. Noise will not be sustained at levels that would disrupt wildlife movement during construction or general traffic conditions (Guideline 19).
- The Proposed Project would not restrict the width of any wildlife corridors through removal of vegetation or barrier. The Proposed Project would remove a small amount of vegetation around the existing tank, but this is on a raised peak that is not part of the path for wildlife movement. The tank site would remain as a tank site and will not create additional barriers to wildlife movement (Guideline 20).
- The tank site and access roads near Corridor 1 would not be altered significantly and therefore would not change the visual continuity of the corridor (Guideline 21).

Overall, impacts to wildlife movement corridors would be **less than significant**.

#### ***Local Policies, Ordinances, and Adopted Plans (Guidelines 22 through 33)***

A significant impact would occur if the project would affect resources protected by local ordinances and NCCP.

NCCP (Guidelines 22, 23, 25, 28 and 31)

Based on the allowed “take” of coastal sage scrub vegetation within the County of San Diego under the NCCP 4(d) Rule (approximately 11,000 acres) the anticipated impacts to 14.5 acres of mature and disturbed coastal sage scrub on-site and off-site would not exceed the five percent allowance. Proposed Project impacts would be **less than significant** (Guideline 22). The Proposed Project is consistent with the proposed subregional NCCP. The project design conforms to the proposed “take authorized” and “preserve” areas developed for the North County MSCP, as discussed in Section 3.1.1

and shown on Figure 3.1-2 . Proposed Project impacts would be **less than significant** (Guideline 23).

Impacts to coastal sage scrub covered under the NCCP Process Guidelines are discussed above and identified as **BR-13**. The Proposed Project minimizes impacts to coastal sage scrub, preserving 85.5 percent on-site. Proposed Project impacts would be **less than significant** (Guideline 25).

The Proposed Project would not preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines. As discussed above, Corridors 1, 2, and 3 will not be significantly impacted by the Proposed Project, and impacts would be **less than significant** (Guideline 28).

The Proposed Project would not reduce the likelihood of survival and recovery of listed species in the wild. Species-specific mitigation is proposed for arroyo toad, California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. Any required permits to take endangered or threatened species will be obtained prior to grading. Project impacts would be **less than significant** (Guideline 31).

#### Habitat Loss Permit (HLP) (Guideline 25)

The Proposed Project is processing a Section 7 take permit with USFWS. However, should the draft North County MSCP be adopted prior to the development of the Proposed Project, the County would implement the 4(d) Rule and NCCP Guidelines through the HLP process. Projects with coastal sage scrub, both occupied and unoccupied, can receive take authorization by obtaining an HLP, eliminating the need for a Section 7 consultation or Habitat Conservation Plan. The HLP is typically granted prior to grading, and requires that certain findings be made. These findings and the Proposed Project's compliance, are summarized below, and would be expanded and finalized by County staff when the actual permit is granted:

- The habitat loss does not exceed the five percent guideline: As of late September 2007, the County's allowed loss was roughly 1,800 acres of coastal sage scrub. The Proposed Project will result in the permanent loss of 14.5 acres of coastal sage scrub and temporary loss of 0.3 acres. Impacts would not be significant.
- The habitat loss will not preclude connectivity between areas of high habitat values: Proposed Project open space is directly connected to planned open space to the north and east. Impacts would not be significant.
- The habitat loss will not preclude or prevent the preparation of the subregional NCCP: The Proposed Project was planned in conjunction with the proposed North County MSCP. That proposed plan shows this property as "Take Authorized" and "Preserve." The Proposed Project is consistent with the proposed MSCP map. Impacts would not be significant.
- The habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the NCCP Process Guidelines: There are 87.1 acres of coastal sage scrub on-site. The Proposed Project will permanently remove approximately 14.5 percent (12.6 acres). An additional 1.9

acres of coastal sage scrub will be affected off-site due to the construction of necessary public infrastructure. Temporary impacts include 0.2 acre on-site and 0.1 acre off-site. Loss of coastal sage scrub has been avoided to the maximum extent practicable. Mitigation for permanent impacts to coastal sage scrub vegetation communities will be provided on-site at a ratio of 2:1. Temporary impacts to coastal sage scrub would be mitigated through revegetation with the same species found within the impact area and is therefore not considered a loss of habitat. Proposed Project impacts would be significant and mitigated as described in Section 3.1.5.

- The habitat loss will not appreciably reduce the likelihood of the survival and recovery of listed species in the wild: The proposed loss of less than 15 acres of possible habitat for the California gnatcatcher will not affect species survival over the long term. Impacts will be mitigated by the preservation of habitat that is located within the proposed PAMA for the North County MSCP. Impacts would not be significant.
- The habitat loss is incidental to otherwise lawful activities: The Proposed Project must be approved by the San Diego County Board of Supervisors, and by definition is a lawful activity.

Should the Proposed Project be required to conform with the HLP process, impacts associated with the take of coastal sage scrub are **less than significant**.

#### Resource Protection Ordinance (Guideline 24)

The Proposed Project will impact the following habitats which are considered sensitive habitat lands under the RPO: 14.5 acres of California gnatcatcher coastal sage scrub habitat of which 13.5 acres are considered occupied.

The small northwest wetland area is a man-made drainage fed by agricultural runoff and is not an RPO wetland. Wetlands within off-site improvement areas for Pala Mesa Drive and Horse Ranch Creek Road are considered RPO wetlands; however, these off-site roadway improvements would occur through properties that have a previously approved Specific Plan. Although, the Specific Plan associated with these properties has been exempted from the strict avoidance of impact provisions of the RPO per Section 86.605(b). The Proposed Project is in conformance with the RPO and impacts associated with failure to adhere to the ordinance are **less than significant**.

A 100-foot wetland buffer is proposed along the riparian woodland west of the southwestern boundary of the Project Site, adjacent to existing off-site wetlands.

#### MSCP (Guidelines 27, 29 and 30)

The Project Site is not within the adopted MSCP and is not subject to the BMO; however, the Proposed Project is designed to be in compliance with the proposed North County MSCP. The Proposed Project does not impact any MSCP narrow endemic plant species as defined in the existing MSCP. Proposed Project impacts to California gnatcatchers, least Bell's vireo, southwest willow flycatcher, and arroyo toads are considered a **significant impact** as identified by **BR-1, BR-2, BR-3, BR-4, BR-5, BR-6, and BR-7**.

#### Migratory Bird Treaty Act (Guideline 32)

The Project Site and off-site improvement areas provide habitat for a variety of native bird species including raptors. No nests, including raptor nests, were observed during surveys. Direct disturbance to the nests of species protected by the Migratory Bird Treaty Act would be a violation of Migratory Bird Treaty Act of 1918. Nests, eggs, and birds of these species are also protected under Fish and Game Code Section 3503. Disturbance to these nesting birds is considered a **significant impact** as identified by **BR-11**.

#### Other Local Ordinances (Guidelines 26)

There are no biological resources on the Project Site protected by local ordinances that are not addressed elsewhere in this report. There are no applicable management plans covering the Proposed Project area. Therefore, impacts associated with conformance with other goals, policies or planning efforts are **less than significant**.

#### Impact to Eagles (Guideline 33)

The Proposed Project would not result in the take of eagles, eagle eggs or any part of an eagle. No eagles were observed in the vicinity of the site. Impacts to eagles would be **less than significant**.

#### **3.1.4 Cumulative Impact Analysis**

The area encompassing the Rainbow Planning Area, Pala-Pauma Planning Area, Fallbrook Planning Area, Bonsall Planning Area, and the Valley Center Planning Area was used as the study area for the cumulative impacts analysis. The area represents a well-defined integrated ecological unit covering 195,715 acres and includes 163,000 acres of the central portion of the San Luis Rey River watershed and home ranges and habitats of sensitive species similar to those found on the Project Site. The Project Site is roughly in the middle of this cumulative impact study area.

The study area includes both upland (coastal sage scrub, grassland, and chaparral) and lowland (wetlands, oak woodland, and riparian areas) ecoregions. The upland habitat within the study area is within the Northern Foothills and Northern Valley Humid Temperate ecological region. This area from Fallbrook to Bonsall to Lilac to Pala is large enough to include the range of resident upland species and large enough to conduct an adequate cumulative assessment. The lowland habitat includes sensitive riparian species habitat along the San Luis Rey River watershed from Bonsall to Pala. The cumulative projects used in this analysis were obtained using county-wide parcel data joined with tabular data from a discretionary projects file from SanGIS that is updated quarterly. The projects found within the cumulative study area are shown on Figure 3.1-8 and listed in Table 3.1-7.

#### ***Special Status Species***

Several proposed projects in the study area have the potential to directly or indirectly impact Designated Critical Habitat, Excluded Essential Habitat or habitat otherwise occupied by arroyo toad, California gnatcatcher and least Bell's vireo according to Guidelines 1 and 4. Impacts that would be caused by projects in the study area would

require a permit through either the Section 10 or Section 7 processes under the Federal Endangered Species Act, as well as other state and local permits. Mitigation would be provided to compensate for impacts. Habitat for these species is also proposed for preservation throughout the cumulative impacts study area through several NCCP/HCP programs which, again, will ensure that impacts are avoided and/or mitigation provided such that long term species viability is ensured. Therefore, potential cumulative impacts to these species would be **less than significant**.

Other special status species identified as occurring or likely to occur on the Project Site, in and around off-site improvement areas, and in the region include Belding's orange-throated whiptail, coastal western whiptail, San Diego coast horned lizard, Coronado western skink, San Diego ringneck snake, northern red rattlesnake, western spadefoot toad, northwestern San Diego pocket mouse, two-striped garter snake, northern harrier, southern California rufous-crowned sparrow, yellow warbler, yellow breasted chat, white-faced ibis, western bluebird, green heron, turkey vulture, white-tailed kite, red-shouldered hawk, barn owl, and Cooper's hawk (Guidelines 2 and 3). While these species are considered "Species of Special Concern" by the CDFG, most of these species are relatively common in appropriate habitat but are either found in one or a few specific habitats, or are locally distributed subspecies of a more widespread species. The Project Site provides suitable foraging, sheltering, or breeding habitat for these species. The majority of the upland habitat, such as coastal sage scrub, chaparral, and grassland, will be preserved on the Project Site to provide for the local and regional conservation needs of these species.

Under current policies, any potential impacts caused by projects in the regional study area would require mitigation under CEQA, generally through the preservation of other open space with appropriate habitat attributes for the sensitive species being affected. Should the draft North County MSCP be adopted, preservation of habitat for these species would be incorporated into regional planning and cumulative impacts to these species would not be significant. Without the adoption of the draft North County MSCP impacts to these Species of Special Concern would be significant. Site design and mitigation of impacts to habitat generally at appropriate mitigation ratios is expected to ensure the long term survival of these species and reduce these impacts to **less than significant**.

### ***Riparian Habitat and Sensitive Natural Communities***

The Proposed Project will directly impact coastal sage scrub, oak woodlands, non-native grassland (including pasture), southern arroyo willow riparian forest, southern willow scrub, willow/mule fat scrub, freshwater marsh and chaparral. Within the cumulative study area, 85 projects are known to support one or more of these habitat types. Table 3.1-7 provides the impact analysis associated with the individual vegetative communities supported by each cumulative project. Impacts to sensitive vegetation communities would require mitigation on a project-by-project basis including providing open space to protect these vegetation communities; mitigation measures (discussed in detail below) proposed by the Proposed Project will be sufficient to mitigate the Proposed Project's minimal contribution to these impacts. Because the Proposed Project will not have a cumulatively considerable impact to riparian habitats and other sensitive natural communities, cumulative impacts are **less than significant**.

### ***Jurisdictional Waters including Wetlands***

The central portion of the San Luis Rey River watershed was analyzed for impacts to jurisdictional wetlands associated with all known projects. Jurisdictional wetlands have the potential to be removed by proposed projects in the study area. The majority of these potential impacts are likely to be avoided through compliance with the RPO. Remaining impacts will require mitigation through the appropriate agencies on a project-by-project basis. Permanent impacts to 3.12 acres of ACOE wetlands, 3.22 acres of CDFG vegetated riparian habitat, and 2.04 acres of RPO wetlands will be contributed by the Proposed Project. Mitigation measures (discussed in detail below) proposed by the Proposed Project will be sufficient to mitigate the Proposed Project's minimal contribution to regional impacts. Additionally, impacts to jurisdictional waters are regulated by the Federal CWA and the CDFG Code, both of which require permits and mitigation measures. Because the Proposed Project will not have a cumulatively considerable impact to jurisdictional wetlands, and mitigation will be required under local, state and federal regulations, cumulative impacts to jurisdictional wetlands and waters are **less than significant**.

### ***Wildlife Movement***

At a regional scale, wildlife movement and core use areas in southern California have been analyzed by the South Coast Wildlands (SCW), a non-profit group that works collaboratively with state and federal agencies to devise plans to maintain natural habitat connections between core habitat areas. SCW has identified one large movement corridor between protected areas that enters the northern portion of the cumulative study area. The majority of this corridor is on public land, and though it has some potential to be impacted without future preservation, there is currently limited development proposed along the southern edge of this corridor in the cumulative study area. The Proposed Project is not located within this large movement corridor. Therefore, cumulative impacts attributable to the proposed project are **less than significant**.

### ***Local Policies, Ordinances, and Adopted Plans***

The cumulative impact study area was analyzed with the Proposed Project to determine the significance of cumulative impacts under local policies, ordinances and adopted plans as well as the draft North County MSCP.

#### **RPO**

The Proposed Project along with other projects in the cumulative study area will contribute to cumulative impacts to RPO sensitive habitat lands. Cumulative impacts on sensitive habitat are discussed above under "Riparian Habitat and Sensitive Natural Communities." The cumulative impacts on wildlife corridors or RPO wetlands as discussed above under "Wildlife Movement" and "Jurisdictional Wetlands and Waterways."

#### **NCCP**

Preservation of large blocks of habitat is a key component of the state Southern California Coastal Sage Scrub NCCP. Coastal sage scrub covers a large area throughout the cumulative study area. Several projects within the cumulative impact



study area have the potential to impact coastal sage scrub habitats. The preservation of 85.5 percent of the existing on-site coastal sage scrub in the proposed open space complies with this NCCP. The loss of 12.6 acres on-site and an additional 1.9 acres off-site will not exceed the County's five percent threshold.

### MSCP

The County's MSCP serves as a Subregional and Subarea NCCP covering some of the unincorporated lands in the southern portion of the County. The draft North County MSCP Subarea Plan for North County. The impacts to coastal sage scrub have been minimized and mitigated by preserving the larger portion of the scrub as open space and connected to a larger block of coastal sage scrub habitat. The Proposed Project's open space design is consistent with the proposed hardline preserve in the draft North County MSCP. Since the Proposed Project has been designed to contribute 115.6 acres to the regional preserve system, for inclusion in the North County MSCP, cumulative impacts to this proposed plan would be **less than significant**.

### **3.1.5 Mitigation Measures Proposed to Minimize the Significant Effects**

Development of the Project Site would result in impacts (both on- and off-site) to a variety of vegetation communities. The mitigation listed below for direct impacts would consist of the preservation of vegetation per the County mitigation ratios. The Conceptual Resource Management Plan and Wetland Mitigation Plan provide detailed direction for how the implementation of the on-site open space and wetland mitigation will be accomplished.

### ***Special Status Species***

- M-BR-1** To mitigate indirect construction-related impacts on the arroyo toad, the owner/permittee shall, using a qualified biologist, implement the following mitigation measure(s):
- a. The project biologist shall meet with the owner, permittee or designee, and the construction crew to conduct an on site educational session regarding the need to avoid impacts outside of the approved development area and identify locations for placement of protective fencing. The project biologist shall continue to monitor grading activities.
  - b. During grading activities, Best Management Practices for erosion control shall be implemented and monitored as needed to prevent any significant sediment transport. These practices may include, but may not be limited to, the following: the use of materials such as sandbags; sediment fencing and erosion control matting to stabilize disturbed areas; and installation of erosion control materials, particularly on the downslope side of disturbed areas, to prevent soil loss.
  - c. All construction activities shall take place only inside the fenced area. Grading materials shall be stored either inside the fenced development area or in an area approved by the project biologist.

- d. A storm drain system and detention basins shall be constructed to restrict excess water flow from proposed roads and structures associated with the Meadowood project. Filter devices shall be installed at the appropriate points to ensure that run-off is cleansed before reaching the basins. All water-catchment features shall be located above graded and natural slopes.
- e. Nighttime lighting shall be shielded and directed away from riparian and upland habitat adjacent to the development.

**M-BR-2** Permanent direct impacts to a total of 14.5 acres on- and off-site, of suitable habitat for California gnatcatcher shall be mitigated on-site at a ratio of 2:1 for a total of 29.0 acres. A total of 74.5 acres of habitat shall be preserved in the proposed on-site open space easement. The mitigation land will also cover impacts to designated Critical Habitat for the California gnatcatcher as detailed in the Conceptual Resource Management Plan (Appendix F-3).

Temporary direct impacts to a total of 0.3 acre on- and off-site shall be mitigated through revegetation of the coastal sage scrub with the same species present within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

Take authorization of the California gnatcatcher and removal of coastal sage scrub habitat shall be obtained through the Section 7 consultation with the USFWS.

**M-BR-3.1** Indirect impacts on the California gnatcatcher shall be mitigated by the following measures to be implemented by the project applicant:

- a. The project biologist shall meet with the owner, permittee or designee, and the construction crew to conduct an on site educational session regarding the need to avoid impacts outside of the approved development area.
- b. During grading activities, Best Management Practices for erosion control shall be implemented and monitored as needed to prevent any significant sediment transport. These practices may include, but may not be limited to, the following: the use of materials such as sandbags; sediment fencing and erosion control matting to stabilize disturbed areas; and installation of erosion control materials, particularly on the downslope side of disturbed areas, to prevent soil loss.
- c. All construction activities shall take place only inside the fenced area. Grading materials shall be stored either inside the fenced development area or in an area approved by the project biologist.
- d. Nighttime lighting shall be shielded and directed away from coastal sage scrub habitat adjacent to the development.

- e. Permanent fencing and signage shall be placed along the trails and/or between the development open space interface in order to be compliant with County standards and as shown on the Landscape Concept Plans.

**M-BR-3.2** Direct impacts on the California gnatcatcher shall be mitigated by the following measures to be implemented by the project applicant:

- a. Habitats will be mitigated on site at a ratio of 2:1 for coastal sage scrub and disturbed coastal sage scrub for a total of 29.0 acres or in accordance with the County guidelines. Temporary impacts would be mitigated through revegetation of the coastal sage scrub with the same species present within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan. This would mitigate shall be incorporated into the Section 7 consultation.
- b. A qualified biologist shall supervise the placement of orange construction fencing or equivalent along the boundary of the development area as shown on the approved grading plans. The location and design for fencing will be recommended and subsequently installed by a qualified biologist.
- c. Prior to any grading or native vegetation clearing associated with project construction, a “directed” survey shall be conducted to confirm the presence or absence of the California gnatcatcher on-site and, if found to be present, to locate active nests (if any). If active nests are present, no grading or removal of habitat will take place within 500 feet of active nesting sites during the nesting/breeding season (February 15 through August 31). Should active nests be abandoned prior to the end of the expected breeding season, grading and construction may proceed within approved grading limits.
- d. Construction noise shall continue to be monitored to verify that noise levels are not adversely affecting behavior and are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Sound barriers shall be put in place if construction noise exceeds 60 db(A) in the immediate vicinity of an active gnatcatcher nest.

**M-BR-4** Impacts to least Bell’s vireo habitat shall be mitigated at a ratio of 3:1 for a total of 11.1 acres to be purchased off-site. This mitigation shall be incorporated into the Section 7 consultation. The habitat will be a southern willow scrub or willow riparian forest habitat which can be occupied by least Bell’s vireo as detailed in the Wetlands Mitigation Plan.

Temporary direct impacts to 2.2 acres shall be mitigated through revegetation of the riparian habitat with the same species present within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

**M-BR-5.1** Indirect impacts to least Bell's vireo shall be mitigated by the following measures to be implemented by the project applicant:

- a. The project biologist shall meet with the owner, permittee or designee, and the construction crew to conduct an on site educational session regarding the need to avoid impacts outside of the approved development area.
- b. During grading activities, Best Management Practices for erosion control shall be implemented and monitored as needed to prevent any significant sediment transport. These practices may include, but may not be limited to, the following: the use of materials such as sandbags; sediment fencing and erosion control matting to stabilize disturbed areas; and installation of erosion control materials, particularly on the downslope side of disturbed areas, to prevent soil loss.
- c. All construction activities shall take place only inside the fenced area. Grading materials shall be stored either inside the fenced development area or in an area approved by the project biologist.
- d. Nighttime lighting shall be shielded and directed away from riparian habitat adjacent to the development.

**M-BR-5.2** Direct impacts to least Bell's vireo shall be mitigated by the following measures to be implemented by the project applicant:

- a. Vireo habitat shall be mitigated at 3:1 for riparian vegetation types for a total of 11.1 acres. Temporary impacts shall be mitigated through revegetation of the riparian vegetation with the same species found within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan. This mitigation will be incorporated into the Section 7 consultation. The off-site location, land manager, and conservation status of the mitigation land will be identified prior to Final Map recordation. The habitat will be a southern willow scrub or willow riparian forest habitat occupied by least Bell's vireo similar to that affected by the project and as detailed in the Wetland Mitigation Plan (Appendix F-4).
- b. A qualified biologist shall supervise the placement of orange construction fencing or equivalent along the boundary of the development area as shown on the approved grading plans. The location and design for fencing will be recommended and subsequently installed by a qualified biologist.
- c. Prior to any grading or native vegetation clearing associated with project construction, a "directed survey" shall be conducted to confirm the presence or absence of the least Bell's vireo on-site and, if found to be present, to locate active nests (if any). If active nests are present, no grading or removal of habitat will take place within 500 feet of active nesting sites during the nesting/breeding season (March 15 through September 15). Should active nests be abandoned prior

to the end of the expected breeding season, grading and construction may proceed within approved grading limits.

- d. Construction noise shall continue to be monitored to verify that noise levels are not adversely affecting behavior and are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Sound barriers shall be put in place if construction noise exceeds 60 db(A) in the immediate vicinity of an active vireo nest

**M-BR-6** Impacts to southwestern willow flycatcher habitat shall be mitigated at a ratio of 3:1 for a total of 11.1 acres to be purchased off-site as detailed in the Wetlands Mitigation Plan (Appendix F-4). This mitigation shall be incorporated into the Section 7 consultation.

Temporary direct impacts to 2.2 acres of suitable habitat shall be mitigated through revegetation of the riparian habitat with the same species present within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

**M-BR-7.1** Indirect impacts on the southwestern willow flycatcher shall be mitigated by the following measures to be implemented by the project applicant:

- a. The project biologist shall meet with the owner, permittee or designee, and the construction crew to conduct an on site educational session regarding the need to avoid impacts outside of the approved development area.
- b. During grading activities, Best Management Practices for erosion control shall be implemented and monitored as needed to prevent any significant sediment transport. These practices may include, but may not be limited to, the following: the use of materials such as sandbags; sediment fencing and erosion control matting to stabilize disturbed areas; and installation of erosion control materials, particularly on the downslope side of disturbed areas, to prevent soil loss.
- c. All construction activities shall take place only inside the fenced area. Grading materials shall be stored either inside the fenced development area or in an area approved by the project biologist.
- d. Nighttime lighting shall be shielded and directed away from riparian habitat adjacent to the development.

**M-BR-7.2** Direct impacts on the southwestern willow flycatcher shall be mitigated by the following measures to be implemented by the project applicant:

- a. Impacts to flycatcher habitat shall be mitigated at 3:1 for riparian vegetation types for a total of 11.1 acres. Temporary impacts shall be mitigated through revegetation of the riparian vegetation with the same species found within the impact area. The revegetation areas

are shown on the Conceptual Landscape Plan. This mitigation shall be incorporated into the Section 7 consultation.

- b. A qualified biologist shall supervise the placement of orange construction fencing or equivalent along the boundary of the development area as shown on the approved grading plans. The location and design for fencing will be recommended and subsequently installed by a qualified biologist.
- c. Prior to any grading or native vegetation clearing associated with project construction, a “directed” survey shall be conducted to confirm the presence or absence of the southwestern willow flycatcher on-site and, if found to be present, to locate active nests (if any). If active nests are present, no grading or removal of habitat will take place within 500 feet of active nesting sites during the nesting/breeding season (May 1 through September 1). Should active nests be abandoned prior to the end of the expected breeding season, grading and construction may proceed within approved grading limits.
- d. Construction noise shall continue to be monitored to verify that noise levels are not adversely affecting behavior and are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Sound barriers shall be put in place if construction noise exceeds 60 db(A) in the immediate vicinity of an active flycatcher nest.

**M-BR-8** Permanent direct impacts to 62.2 acres of foraging habitat for birds of prey and other special status species shall be mitigated through preservation of 122.4 acres of open space on-site within a regional open space network as detailed in the Conceptual Resource Management Plan (Appendix F-3).

Temporary impacts would be mitigated through revegetation of foraging habitat with the same plant species found within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

Indirect impacts shall be mitigated by the following measures:

- a. Shielding lighting away from the open space.
- b. Monitoring noise levels during construction.
- c. Use of range construction fencing, and silt fencing.
- d. Permanent fencing and signage shall be placed along the trails and/or between the development open space interface in order to be compliant with County standards and as shown on the Landscape Concept Plans.

- M-BR-9** Impacts to the western spadefoot shall be mitigated by the purchase of 11.1 acres of riparian forest and scrub habitat.

Additionally, prior to project grading, a written relocation plan shall be prepared and approved by the County and CDFG. In accordance with the plan, western spadefoot toads shall be trapped and relocated. The timing and duration of the relocation program will be based on the activity period of the western spadefoot (generally associated with rainfall and temperature) and proposed construction schedule.

Trapping will occur along the existing pitfall traps located along the western and southern property boundaries and monitored prior to and during proposed construction activities. Any western spadefoot found in the traps will be collected, noted and relocated to predetermined receptor sites within the region. Trapping and relocation shall be conducted by a biologist familiar with the biological natural history of the western spadefoot and possesses a CDFG Memorandum of Understanding (MOU) for conducting these activities. At the end of the relocation effort, the biologist will prepare a summary report noting the number of western spadefoot relocated, the location of the area to which they were moved, and other pertinent facts. The report shall be submitted to the County and CDFG.

- M-BR-10** Permanent and temporary impacts to the 14 special status wildlife species identified on-site shall be mitigated through preservation of 122.4 acres of open space on-site within a regional open space network as detailed in the Conceptual Resource Management Plan (Appendix F-3).

- M-BR-11** Impacts to nesting birds shall be mitigated through the following measures:

- a. Vegetation clearing shall take place outside of the nesting season, roughly defined as mid-February to mid-September. Vegetation clearing activities could occur within potential nesting habitat during the breeding season with written concurrence from the Director of the Department of Planning and Land Use (DPLU), the USFWS, and the CDFG that nesting birds would be avoided. If vegetation removal is to take place during the nesting season, a biologist shall be present during vegetation clearing operations to search for and flag active nests so that they can be avoided.
- b. Prior to any grading or native vegetation clearing during the nesting/breeding season for raptors (roughly from mid-February through mid-July), a “directed” survey shall be conducted to locate active raptor nests, if any. If active raptor nests are present, no grading or removal of habitat will take place within 500 feet of any active nesting sites. The project proponent may seek approval from the Director of DPLU if nesting activities cease prior to July 15.

- c. Prior to any grading or native vegetation clearing associated with project construction, a “directed” survey shall be conducted to confirm the presence or absence of the California gnatcatcher, least Bell’s vireo, and southwestern willow flycatcher on-site and, if found to be present, to locate active nests (if any). If active nests are present, no grading or removal of habitat will take place within 500 feet of active nesting sites during the nesting/breeding season (February 15 through August 31 for gnatcatcher, March 15 through September 15 for vireo, and May 1 through September 1 for flycatcher). Should active nests be abandoned prior to the end of the expected breeding season, grading and construction may proceed within approved grading limits.

**M-BR-12** General indirect impacts associated with external community lighting shall be mitigated through all communal lighting associated with the project will be shielded and directed away from the urban/natural edge. The Proposed Project shall be designed to be in compliance with the San Diego County Light Pollution Code (Sections 59.101-59.115). A lighting plan shall be included in the grading plans which shows required lighting adjacent to the open space as being shielded, unidirectional, low pressure sodium illumination (or similar), and directed away from preserve areas using appropriate placement and shields.

### ***Riparian Habitat and Sensitive Natural Communities***

**M-BR-13** Permanent impacts to coastal sage scrub and disturbed coast sage scrub shall be mitigated at the ratio of 2:1 totaling 29.0 acres within the 122.4-acre proposed on-site open space easement as detailed in the Conceptual Resource Management Plan (Appendix F-3). (Actual amount of coastal sage scrub preserved on-site is 74.5 acres). Temporary impacts in the amount of 0.3 acres shall be mitigated through revegetation with the same plant species found within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

**M-BR-14** Permanent impacts to southern mixed chaparral shall be mitigated at the ratio of 0.5:1 totaling 1.1 acres within the 122.4 acre proposed on-site open space easement as detailed in the Conceptual Resource Management Plan (Appendix F-3). (Actual amount of southern mixed chaparral preserved on-site is 17.5 acres).

**M-BR-15** Permanent impacts to coast live oak woodland shall be mitigated at the ratio of 3:1 totaling 0.9 acres within the 122.4 acre proposed on-site open space easement as detailed in the Conceptual Resource Management Plan (Appendix F-3). (Actual amount of coast live oak woodland preserved on-site is 1.7 acres).

**M-BR-16** Permanent impacts to non-native grassland shall be mitigated at the ratio of 0.5:1 totaling 7.7 acres within the 122.4 acre proposed on-site open space easement as detailed in the Conceptual Resource Management Plan (Appendix F-3). (Actual amount of non-native grassland preserved on-site is 22.0 acres).



**M-BR-17** Permanent impacts to pastureland shall be mitigated at the ratio of 0.5:1 totaling 15.1 acres of non-native grassland. A portion of the mitigation shall be on-site within the proposed open space easement. An additional 2.7 acres of mitigation land is required and shall be preserved off-site as detailed in the Conceptual Resource Management Plan (Appendix F-3).

**M-BR-18** Impacts to willow/mule fat scrub, southern willow scrub, southern arroyo willow riparian forest, and freshwater marsh shall be mitigated through dedication, restoration, creation and/or enhancement of wetlands at a ratio of 3:1 for a total of 12.3 acres or as defined through required state and federal wetland permits as detailed in the Wetland Mitigation Plan (Appendix F-4). Temporary impacts shall be mitigated through revegetation with the same plant species found within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

***Jurisdictional Waters including Wetlands***

**M-BR-19** Impacts to jurisdictional wetlands will follow the terms and conditions of permits and agreements with ACOE and CDFG.

Permanent impacts shall be mitigated at a ratio of 3:1 and shall consist of purchase and dedication of replacement habitat, creation of wetlands, and revegetation of disturbed riparian habitat. Mitigation measures for impacts to ACOE jurisdictional wetlands, CDFG vegetated riparian habitat, and RPO wetlands are listed as follows:

- ACOE jurisdiction: Permanent impacts to 0.83 acre on-site and 2.29 acres off-site, for a total of 3.12 acres of ACOE jurisdictional waters and wetlands shall be mitigated with 9.36 acres of ACOE jurisdictional waters and wetlands.
- CDFG jurisdiction: Permanent impacts to 0.93 acres on-site and 2.29 acres off-site, for a total of 3.22 acres of CDFG jurisdictional waters and vegetated riparian habitat shall be mitigated with 9.66 acres of CDFG jurisdictional waters and vegetated riparian habitat.
- RPO jurisdiction: Permanent impacts to 2.29 acres of RPO wetlands off-site shall be mitigated with 6.87 acres of RPO wetlands.

Details are contained with the Wetlands Mitigation Plan.

**M-BR-20** Temporary impacts to 2.04 acres of jurisdictional wetlands shall be mitigated through revegetation with the same plant species found within the impact area. The revegetation areas are shown on the Conceptual Landscape Plan.

### **3.1.6 Conclusion**

#### ***Special Status Species***

Impact BR-1: Construction activity could result in significant indirect impacts to the Arroyo Toad as a result of increased lighting, debris, potential erosion within the drainage area and any increase or change in run-off from the Project Site. M-BR-1 requires the use of a biologist to direct the construction of protective fencing and monitor grading activities. Implementation of this mitigation measure would reduce the significant effect because it would assure that toads remain outside of construction areas where they could be harmed by lighting, debris, eroding soils, or be displaced by a change in run-off. With implementation of this mitigation measure, Impact BR-1 would be less than significant.

Impact BR-2: Permanent impacts to 14.5 acres of coastal sage scrub habitat and temporary impacts to 0.3 acre coastal sage scrub habitat would result in a significant impact due to the reduction of viable habitat for the California gnatcatcher. M-BR-2 requires preservation of the habitat at the ratio of 2:1 for a total of 29.0 acres. The actual amount preserved within the dedicated open space is 74.5 acres. Implementation of this mitigation measure reduces the potentially significant effect because it provides compensation for the wildlife value of this vegetation community. The mitigation ratio for coastal sage scrub was developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the Wildlife Agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County of San Diego since the Biological Report Guidelines were developed in the mid-1990s (adopted by the Board of Supervisors). This ratio is effective because these reviewing agencies have reached consensus that retention at these ratios will result in sustainable levels of this habitat. Preservation of the coastal sage scrub within an open space easement would mitigate for loss of habitat by providing areas where potentially dislocated birds could relocate and thrive. With implementation of this mitigation measure, Impact BR-2 would be less than significant.

Impact BR-3: Construction activities and Proposed Project operation could result in significant indirect impacts to the California gnatcatcher as a result of increased noise, lighting, potential erosion and debris. M-BR-3 requires the retention of a project biologist to oversee the placement of fencing along development areas. Additionally, directed California gnatcatcher surveys are required to be conducted prior to grading. Implementation of this mitigation measure would reduce the potentially significant effect because if active nests are located within 500 feet of construction activities restrictions on grading and habitat removal will be implemented. This distance has been determined by the wildlife agencies to adequately attenuate disturbances allowing gnatcatchers to be protected from movement and noise from construction activities during the breeding season. Because the daily activities of this species would not be disrupted, breeding and nesting activities would continue within the proposed open-space thus helping to ensure the survival of the species. With implementation of this mitigation measure, Impact BR-3 would be less than significant.

Impact BR-4: Proposed Project implementation would result in permanent direct impacts to 3.7 acres of southern willow scrub and southern arroyo willow riparian forest habitats. This represents a significant impact due to a reduction of habitat supporting least Bell's vireo. M-BR-4 requires mitigation of the directly impacted habitat at the ratio of 3:1 for a

total of 11.1 acres. Implementation of this mitigation measure reduces the potentially significant effect because it provides compensation for the wildlife value of this vegetation community. The mitigation ratio for southern willow scrub/ willow riparian forest was developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the Wildlife Agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County of San Diego since DPLU developed its first Biological Report Guidelines in the mid 1990s (adopted by the Board of Supervisors). The ratio is effective because consensus has been reached by the reviewing agencies that this level of preservation assures the continuity of the species within protected habitat. Additionally, 2.2 acres of the habitat would be temporarily impacted during construction of road improvements. These temporary impacts would be mitigated through restoration of the vegetation assuring the habitat is returned to a state which can support the continuity of a viable population of the species. With implementation of this mitigation measure, Impact BR-4 would be less than significant.

Impact BR-5: Construction activities associated with off-site improvements could result in significant indirect impacts to least Bell's vireo habitat due to increased noise, lighting, potential erosion and debris. M-BR-5 requires the retention of a project biologist to oversee the placement of fencing along development areas. Additionally, directed least Bell's vireo surveys are required to be conducted. Implementation of this mitigation measure would reduce the potentially significant effect because if active nests are located within 500 feet of construction activities restrictions on grading and habitat removal will be implemented allowing the breeding and/or nesting birds to be undisturbed. This distance has been determined by the wildlife agencies to adequately attenuate noise and disturbance to a level where nesting and breeding birds are not affected. Because the daily activities of this species would not be disrupted, breeding and nesting activities would continue within the proposed open-space thus helping to ensure the survival of the species. With implementation of this mitigation measure, Impact BR-5 would be less than significant.

Impact BR-6: As stated in BR-4, above, road improvements could result in permanent direct impacts to 3.7 acres and temporary impacts to 2.2 acres of southern willow scrub and southern arroyo willow riparian forest habitats. Although unoccupied by southwestern willow flycatcher an impact could result from removal of this habitat which is known to support this species. M-BR-6 is the same as M-BR-4 requiring mitigation of the habitat at the ratio of 3:1 for a total of 11.1 acres. Implementation of this mitigation measure reduces the potentially significant effect because the mitigation ratio for southern arroyo willow riparian forest was developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the Wildlife Agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County of San Diego since DPLU developed its first Biological Report Guidelines in the mid 1990s (adopted by the Board of Supervisors). Consensus has been reached by the reviewing agencies that this ratio is effective because it provides compensation for the wildlife value of this naturalized vegetation type. Although presently unoccupied, the mitigation provides protection of habitat suitable for supporting southwestern willow flycatcher. With implementation of this mitigation measure, Impact BR-6 would be less than significant.

Impact BR-7: Construction activities could result in significant indirect impacts to southwestern willow flycatcher habitat due to increased noise, lighting, potential erosion

and debris. M-BR-7 requires the retention of a project biologist to oversee the placement of fencing along development areas. Additionally, directed southwestern willow flycatcher surveys are required to be conducted. Implementation of this mitigation measure would reduce the potentially significant effect because if active nests are located within 500 feet of construction activities restrictions on grading and habitat removal will be implemented resulting in the attenuation of noise and disturbance to a level where nesting and breeding birds are not affected. With implementation of this mitigation measure, Impact BR-7 would be less than significant.

Impact BR-8: The permanent removal of 62.2 acres and temporary impact to 5.5 acres of foraging habitat for raptors would constitute a significant impact. M-BR-8 requires the on-site preservation of 122.4 acres of Designated Open Space. Implementation of this mitigation measure would reduce the potentially significant effect because preservation of these lands would adequately provide open lands that are suitable for rodents and other small prey which would assure the on-going viability of the local raptor population. With implementation of this mitigation measure, Impact BR-8 would be less than significant.

Impact BR-9: The removal of the orchard and agricultural areas of the Project Site could result in impacts to western spadefoot toad due to removal of suitable habitat. M-BR-9 requires the trapping and relocation of toads prior to and during project grading. Implementation of this mitigation measure would reduce the potentially significant effect because it provides a mechanism for the safe collection of any member of the species residing on-site and the relocation at predetermined locations as part of a Memorandum of Understanding with the CDFG allowing the on-going viability of the species at another suitable location. With implementation of this mitigation measure, Impact BR-9 would be less than significant.

Impact BR-10: Permanent impacts to 14.5 acres of coastal sage scrub, 2.2 acres of southern mixed chaparral, 30.2 acres of pastureland and 15.3 acres of non-native grassland and temporary impacts to a total of 5.5 acres of the same habitats would result in a significant impact due to the removal of habitat supporting the 14 special status wildlife supported by the Project Site. M-BR-10 requires the on-site preservation of 122.4 acres of Designated Open Space. Implementation of this mitigation measure would reduce the potentially significant effect because preservation of these lands would provide an adequate area for the continued viability of the special status wildlife species. With implementation of this mitigation measure, Impact BR-10 would be less than significant.

Impact BR-11: Implementation of the Proposed Project could result in significant impacts to nesting birds if clearing, grading or, building demolition is undertaken during the breeding seasons. M-BR-11 requires all vegetation clearing activities to occur outside of nesting seasons unless specifically allowed by written concurrence from DPLU, USFWS and CDFG. Additionally, a “directed” survey is required prior to any clearing or grading during raptor nesting/breeding season in which case, if active nests are found, no removal is allowed to occur within 500 feet of the nest. Likewise, “directed” surveys of California gnatcatcher, least Bell’s vireo, and southwestern willow flycatcher are to occur prior to any clearing or grading activities during each appropriate breeding season. A Limited Building Zone is also required providing a buffer around any building needing brush management for fire protection. Implementation of this mitigation measure would reduce the potentially significant effect because it will assure that nesting birds are

identified prior to potential damage to the nests. The measure also provides for the continued protection of the breeding birds and their habitat. With implementation of this mitigation measure, Impact BR-11 would be less than significant.

Impact BR-12: Increased external community lighting could result in a significant impact due to disruption caused by light shining directly into preserved habitat. M-BR-12 requires that all lighting be shielded and directed away from natural areas pursuant to the SD County Light Pollution Code and project lighting plan. Implementation of this mitigation measure would reduce the potentially significant effect because it will assure that the preserve areas are protected from light and glare. With implementation of this mitigation measure, Impact BR-12 would be less than significant.

### ***Riparian Habitat and Sensitive Natural Communities***

Impacts BR-13, BR-14, BR-15, BR-16 and BR-17: The disturbance of sensitive native and naturalized habitats on and off-site could affect wildlife that is supported within each. Specifically, the following would result in significant impacts: the permanent removal of 14.5 acres of coastal sage scrub (BR-13); the permanent removal of 2.2 acres of on-site southern mixed chaparral (BR-14); the permanent removal of 0.3 acres of coast live oak woodland (BR-15); the permanent removal of 15.3 acres of non-native grasslands (BR-16); and the permanent removal of 30.2 acres of pastureland (BR-17). M-BR-13 through M-BR-17 require the on-site preservation of 171.7 acres, comprised of a 122.4-acre Designated Open Space area and a 49.3-acre Agricultural Open Space area. An additional 2.7 acres will be preserved off-site to meet mitigation ratio totals. Implementation of these mitigation measures would reduce the potentially significant effects because preservation of these lands would adequately provide open lands suitable for the continued viability of wildlife supported within these habitats. With implementation of these mitigation measures, Impact BR-13 through BR-17 would be less than significant.

Impact BR-18: Implementation of the Proposed Project would result in the removal of 4.1 acres of wetland vegetation comprised of 0.1 acre of isolated willow/mule fat scrub on-site and 0.9 acre of southern willow scrub, 2.8 acres of southern arroyo willow riparian forest and 0.3 acre of freshwater marsh off-site. The loss of this habitat represents a significant impact. M-BR-18 requires the dedication, restoration, creation and/or enhancement of wetlands at a ratio of 3:1 for a total of 12.3 acres. Implementation of this mitigation measure reduces the potentially significant effect because it provides compensation for the wildlife value of this rare and sensitive vegetation type. The mitigation ratio for wetland protection was developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the Wildlife Agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County of San Diego since DPLU developed its first Biological Report Guidelines in the mid 1990s (adopted by the Board of Supervisors). The ratio is effective because the reviewing agencies have reached consensus that retention at this ratio will result in sustainable levels of this habitat. With implementation of this mitigation measure, Impact BR-18 would be less than significant.

### ***Jurisdictional Waters including Wetlands***

BR-19: Implementation of the Proposed Project will result in permanent impacts to the following jurisdictional wetlands and waterways: 3.12 acres of ACOE jurisdiction; 3.22 acres of CDFG jurisdiction; and 2.29 acres of RPO wetlands. These impacts are considered significant due to the loss of a rare and sensitive habitat. M-BR-19 requires the dedication, restoration, creation and/or enhancement of wetlands at a ratio of 3:1 for a total of 9.36 acres of ACOE jurisdictional waters and wetlands, 9.66 acres of CDFG jurisdictional waters and vegetated riparian habitat and 6.87 acres of County wetlands all to be mitigated within the 11.1 acre off-site mitigation requirement. Implementation of this mitigation measure reduces the potentially significant effect because the mitigation ratio for wetland protection was developed based on NCCP Guidelines (CDFG and California Resources Agency 1997), and the Wildlife Agencies have reviewed and approved these mitigation ratios. Consensus has been reached by the reviewing agencies that retention at this ratio will result in sustainable levels of this habitat. Additionally, these standard ratios have been applied to projects within the County of San Diego since DPLU developed its first Biological Report Guidelines in the mid 1990s (adopted by the Board of Supervisors). With implementation of this mitigation measure, Impact BR-19 would be less than significant.

BR-20: Off-site improvements associated with the Proposed Project will result in temporary impacts to 2.04 acres of jurisdictional wetlands. These improvement areas represent significant impacts due to the disturbance of a rare and sensitive habitat. M-BR-20 requires restoration of all disturbed areas to their original conditions allowing regrowth of vegetation and the return of wildlife assuring the continuity of viable habitat. With implementation of this mitigation measure, Impact BR-20 would be reduced to below a level of significance.

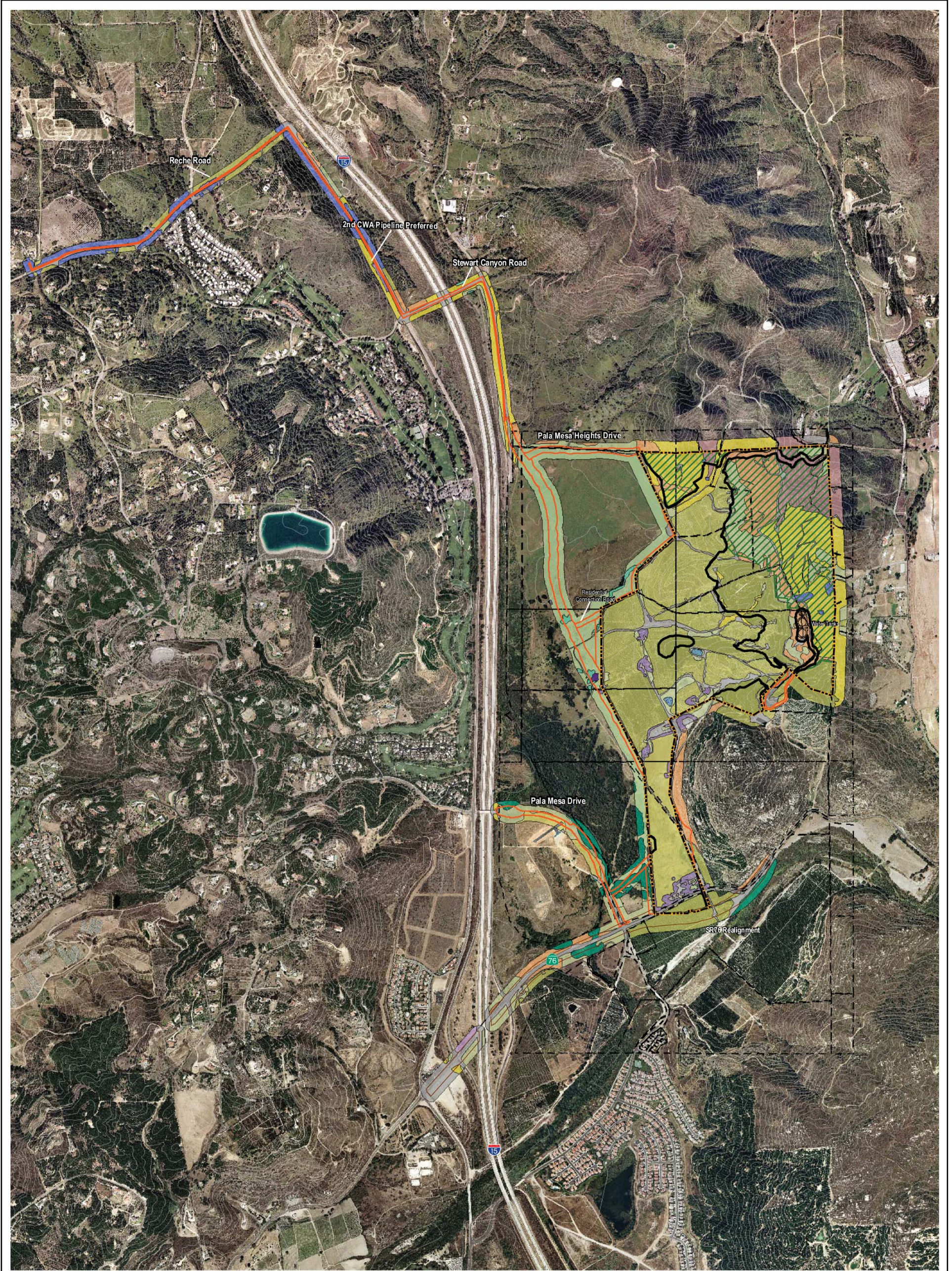
### ***Wildlife Movement***

Development of the Project Site and associated off-site improvement areas would not impact regional wildlife movement. Construction of Pala Mesa Drive will not adversely affect access to local foraging and breeding habitat as it will be located south of the main Horse Ranch Creek drainage area. In addition, utilizing the existing Pankey Road Bridge will allow for continued access for small wildlife to riparian vegetation to the southwest. Thus, interference with wildlife movement has been avoided through project design ensuring that impacts would be less than significant.

### ***Local Policies, Ordinances, and Adopted Plans***

There would be no impacts to biological resources protected by local ordinances that are not already addressed by mitigation measures for vegetation communities, special status species, or jurisdictional wetlands. Through the mitigation measures listed above (**M-BR-1** through **M-BR-20**) and design considerations the project will comply with all applicable local ordinances, policies, and plans and impacts would be less than significant.





- |                           |   |  |
|---------------------------|---|--|
| Boundary                  | (AG) Agriculture - 18000/18100              | (OW) Coast Live Oak Woodland - 71160                   |
| On Site Impact Area       | (NNG) Non-native Grassland - 42200          | (WMS) Willow and Mulefat Scrub - 63300                 |
| Off-site Improvements     | (CSS) Coastal Sage Scrub - 32500            | (SAWRF) Southern Arroyo Willow Riparian Forest - 61320 |
| Proposed SR76 Realignment | (DCSS) Disturbed Coastal Sage Scrub - 32500 | (SWS) Southern Willow Scrub - 63320                    |
| Parcel Boundaries         | (CHP) Southern Mixed Chapparral - 37120     | (FWM) Freshwater Marsh - 52400                         |
| Open Space                | (NNT) Non-native Trees - 11000              | (OWP) Open Water Ponds - 13100                         |
|                           | (PAS) Pasture - 18310                       | (DIST) Disturbed - 11000/12000/13000                   |

FIGURE 3.1-1  
Biological Resources



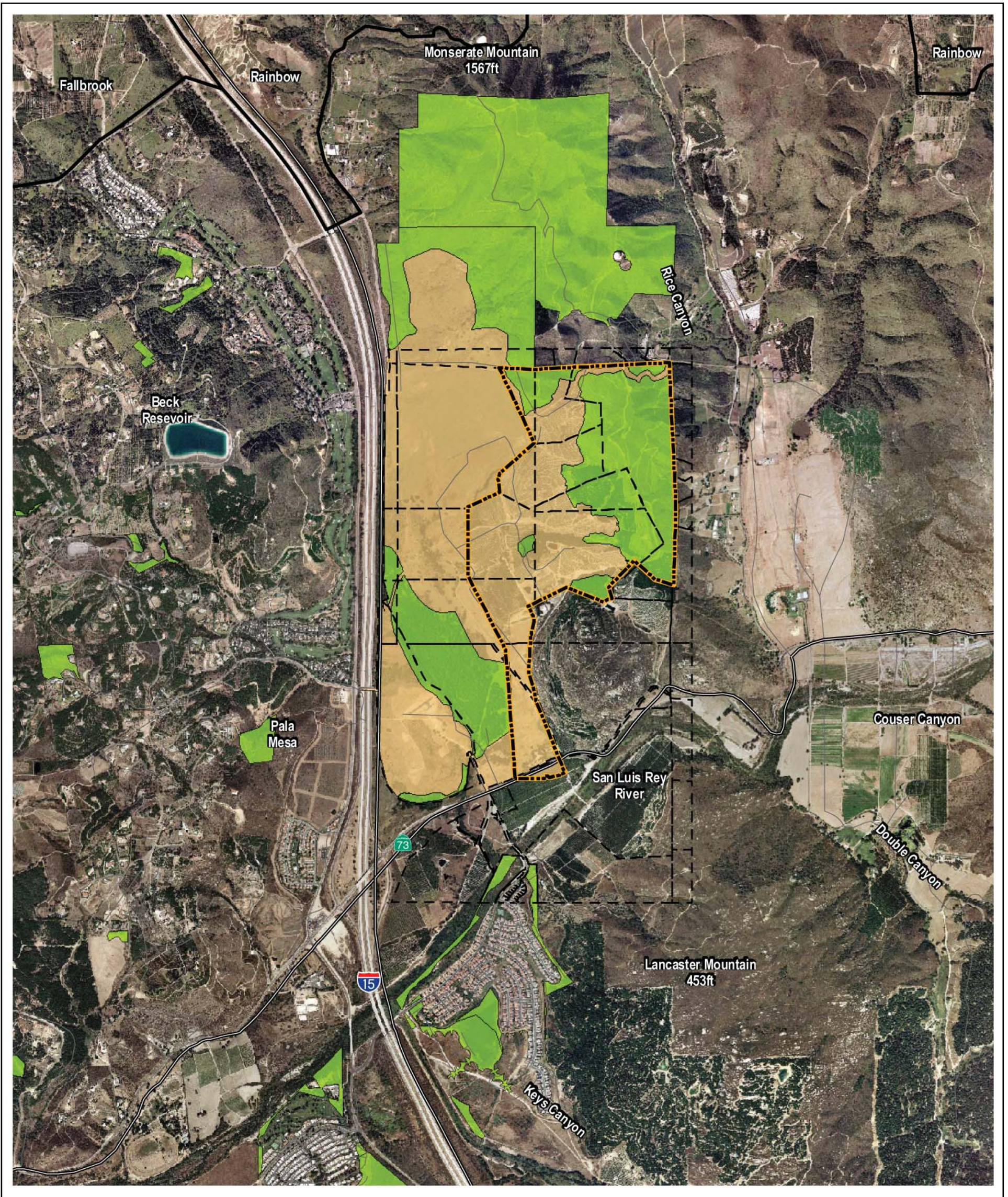


FIGURE 3.1-2  
Draft North County MSCP



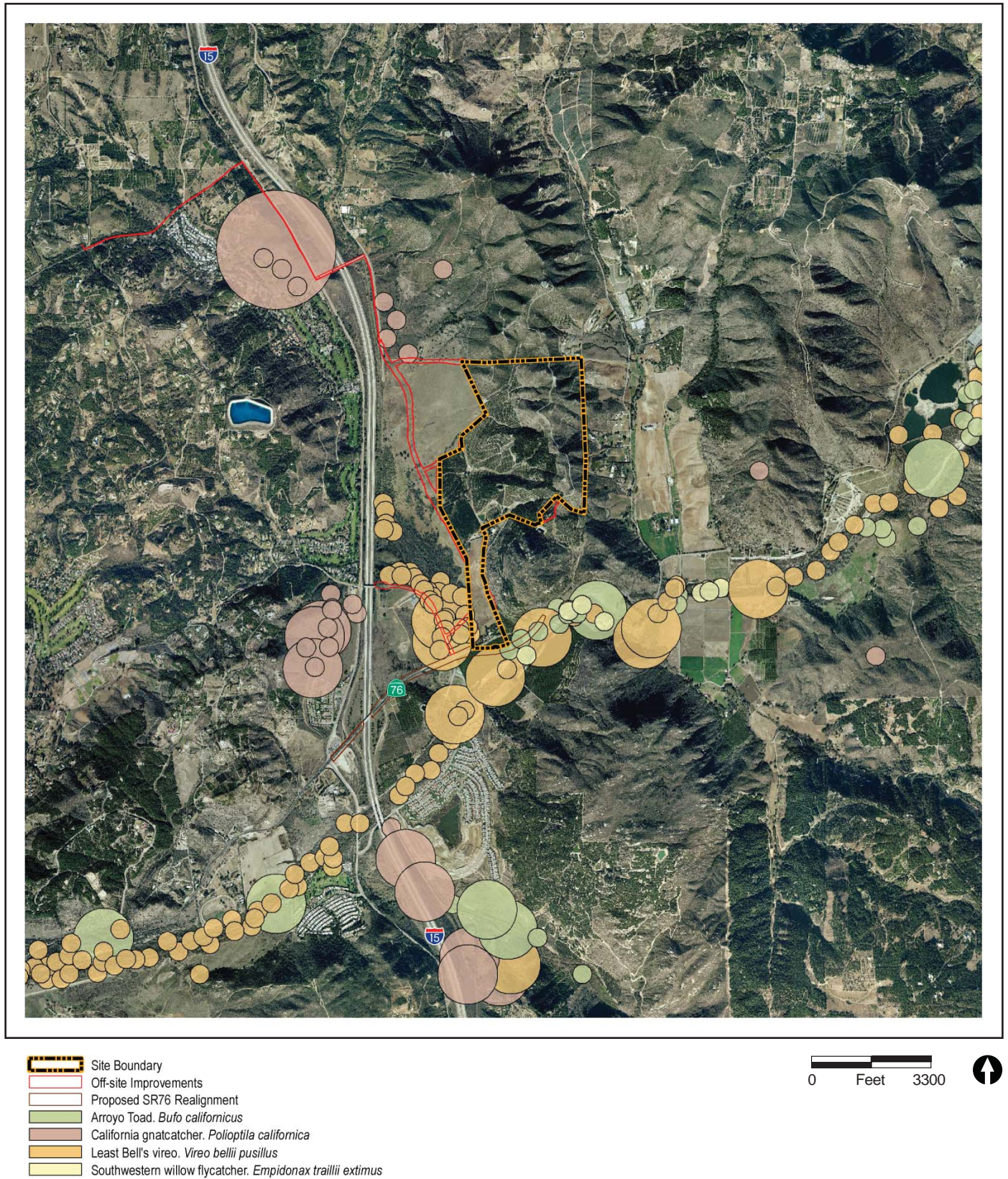
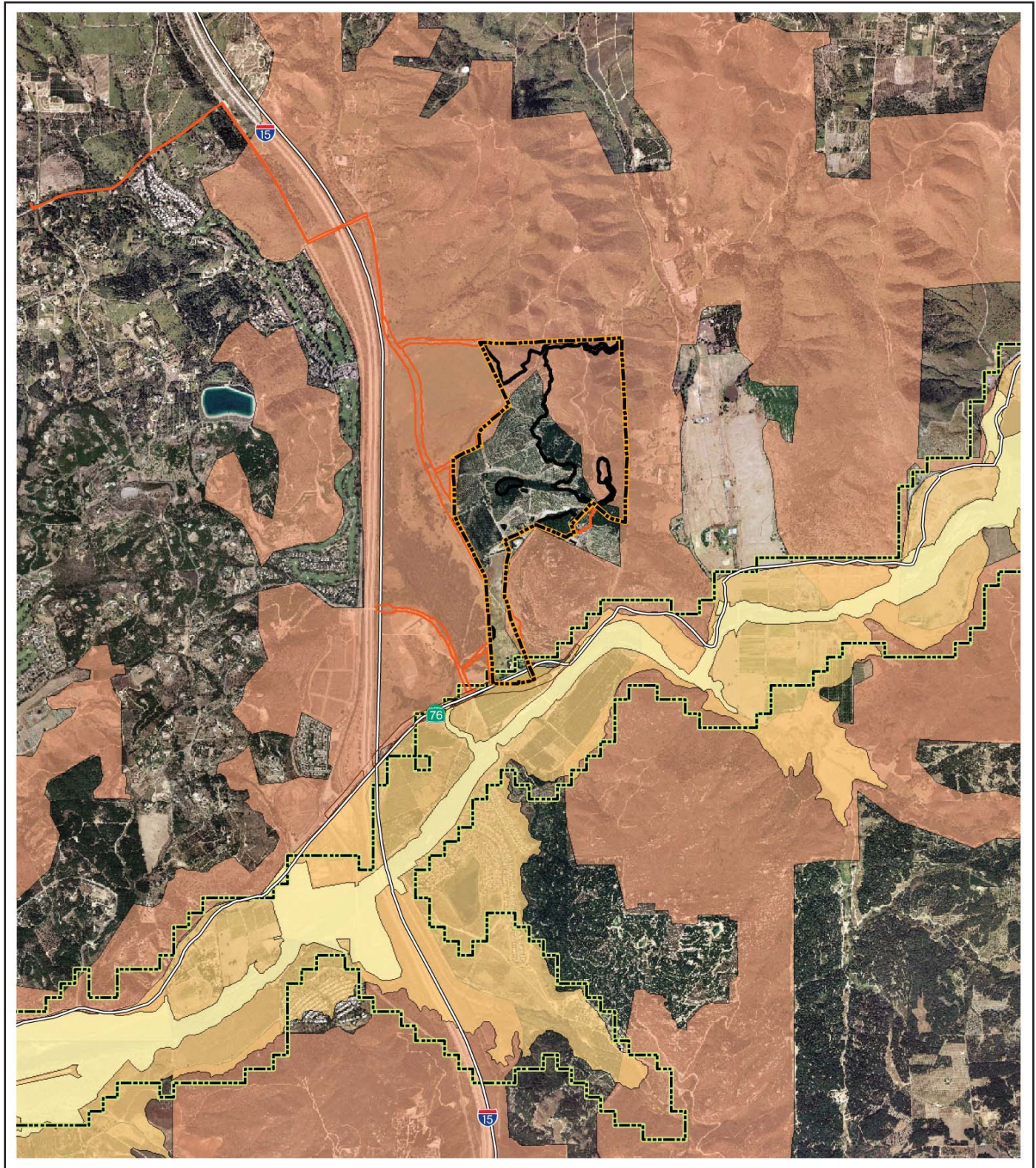


FIGURE 3.1-3  
Federally Listed Species in Project Vicinity





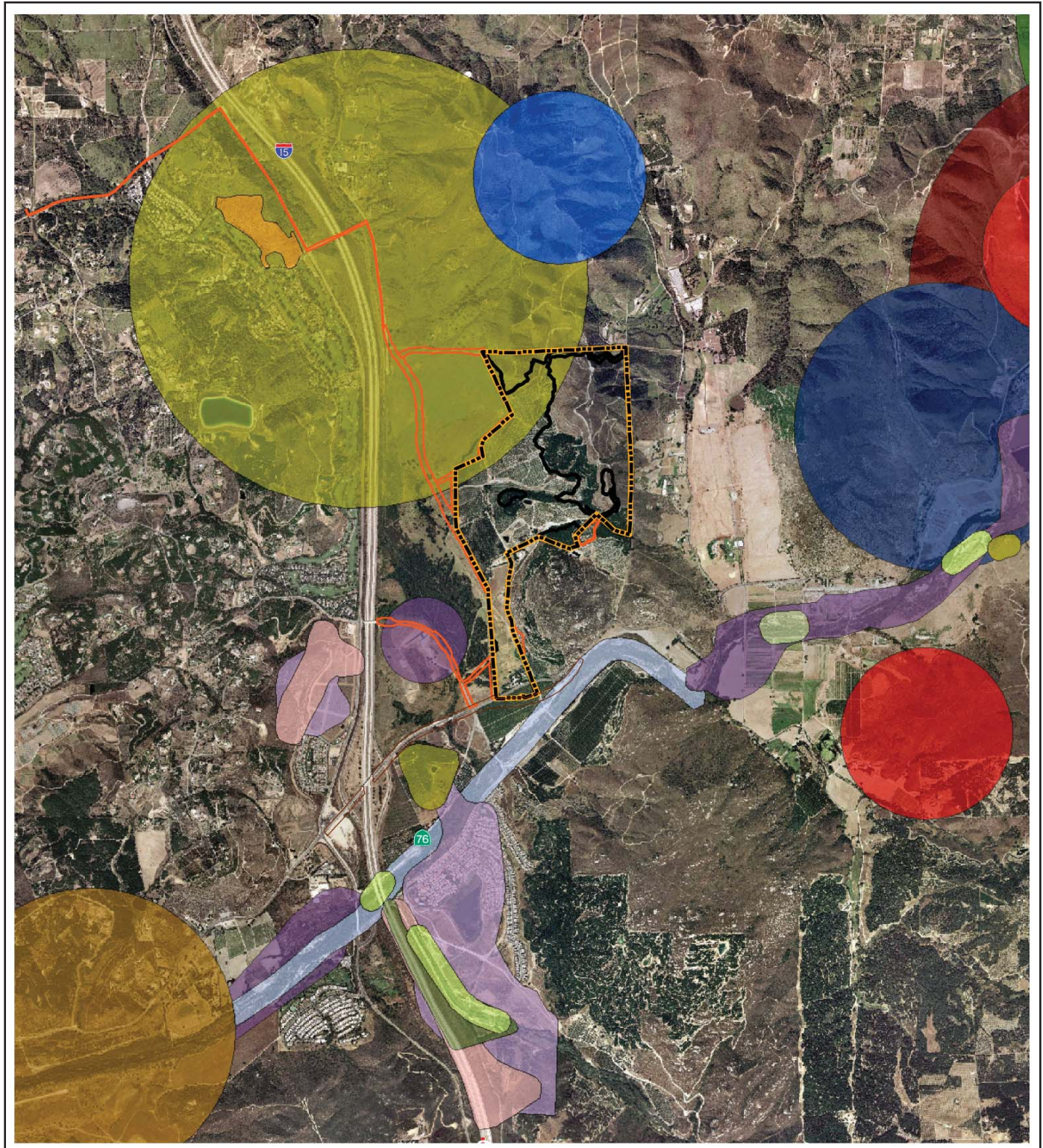
- Site Boundary
- On Site Impact Area
- Off-site Improvements
- SR76 Realignment
- Arroyo Toad. *Bufo californicus* (E, CH designated April 2005) Excluded Essential Habitat
- Southwestern willow flycatcher. *Empidonax traillii extimus* (E, CH designated Oct 2005)
- Least Bell's vireo. *Vireo bellii pusillus* (E, CH designated Feb 1994)
- California gnatcatcher. *Poliptila californica* (T, CH designated 2007)

0 Feet 3100



**FIGURE 3.1-4**  
Critical Habitat in Project Vicinity





- |  |                                  |  |
|--|----------------------------------|--|
| Meadowood boundary                         | Coronado skink                   | least Bell's vireo                         |
| On Site Impact Area                        | northern red-diamond rattlesnake | least bittern                              |
| Off-site Improvements                      | orange-throated whiptail         | southern California rufous-crowned sparrow |
| SR76 Realignment                           | rosy boa                         | southwestern willow flycatcher             |
| Southern Cottonwood Willow Riparian Forest | San Diego desert woodrat         | white-faced ibis                           |
| chaparral nolina                           | Cooper's hawk                    | yellow warbler                             |
| Parry's tetracoccus                        | coastal California gnatcatcher   | yellow-breasted chat                       |
| Robinson's pepper-grass                    | coastal cactus wren              |  |
| arroyo toad                                | golden eagle                     |  |

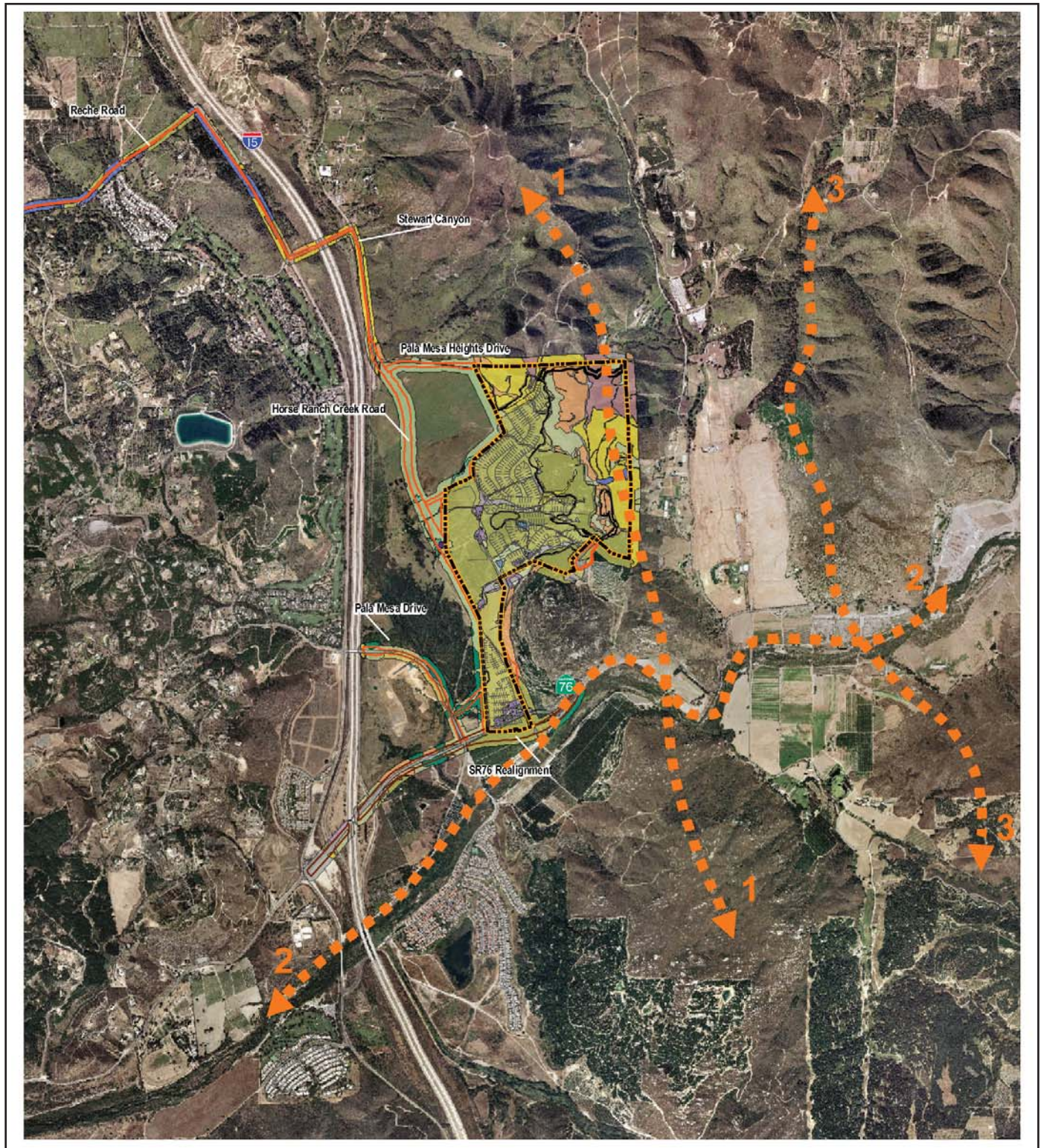
0 Feet 3000



FIGURE 3.1-5

Special Status Species in Project Vicinity





0 Feet 2500

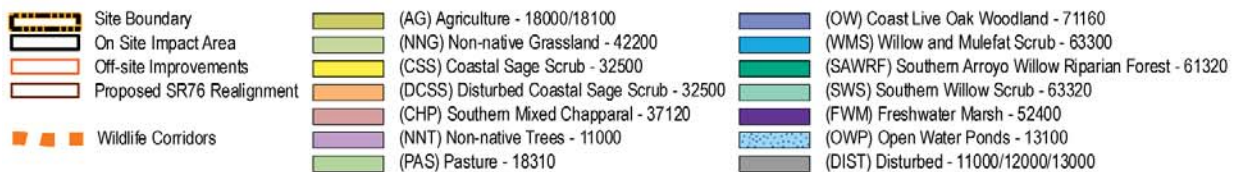
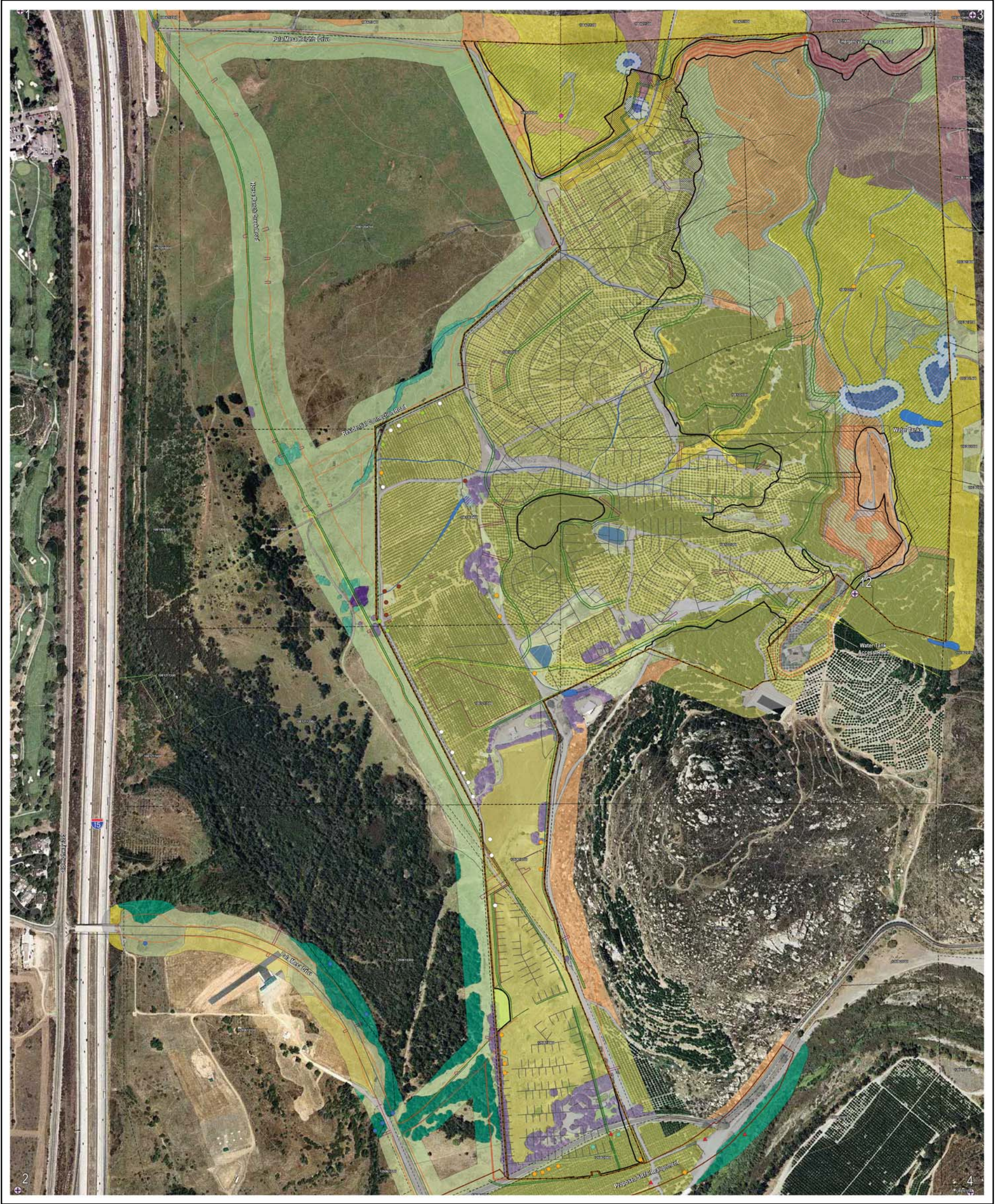


FIGURE 3.1-6  
Wildlife Corridors





0 Feet 400

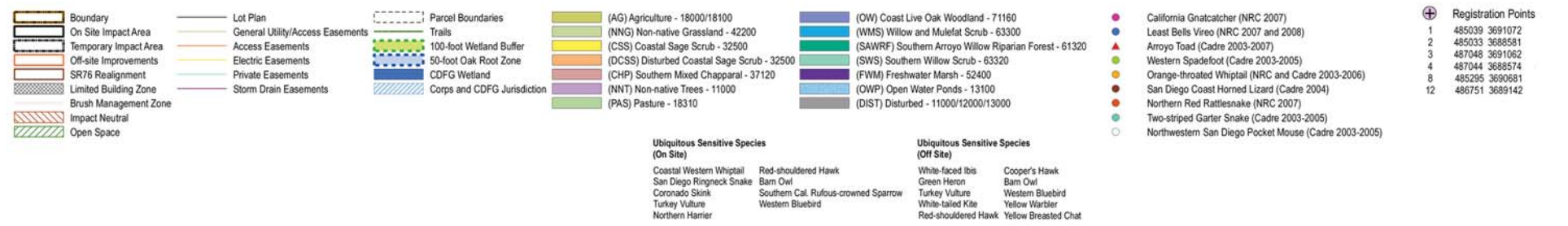
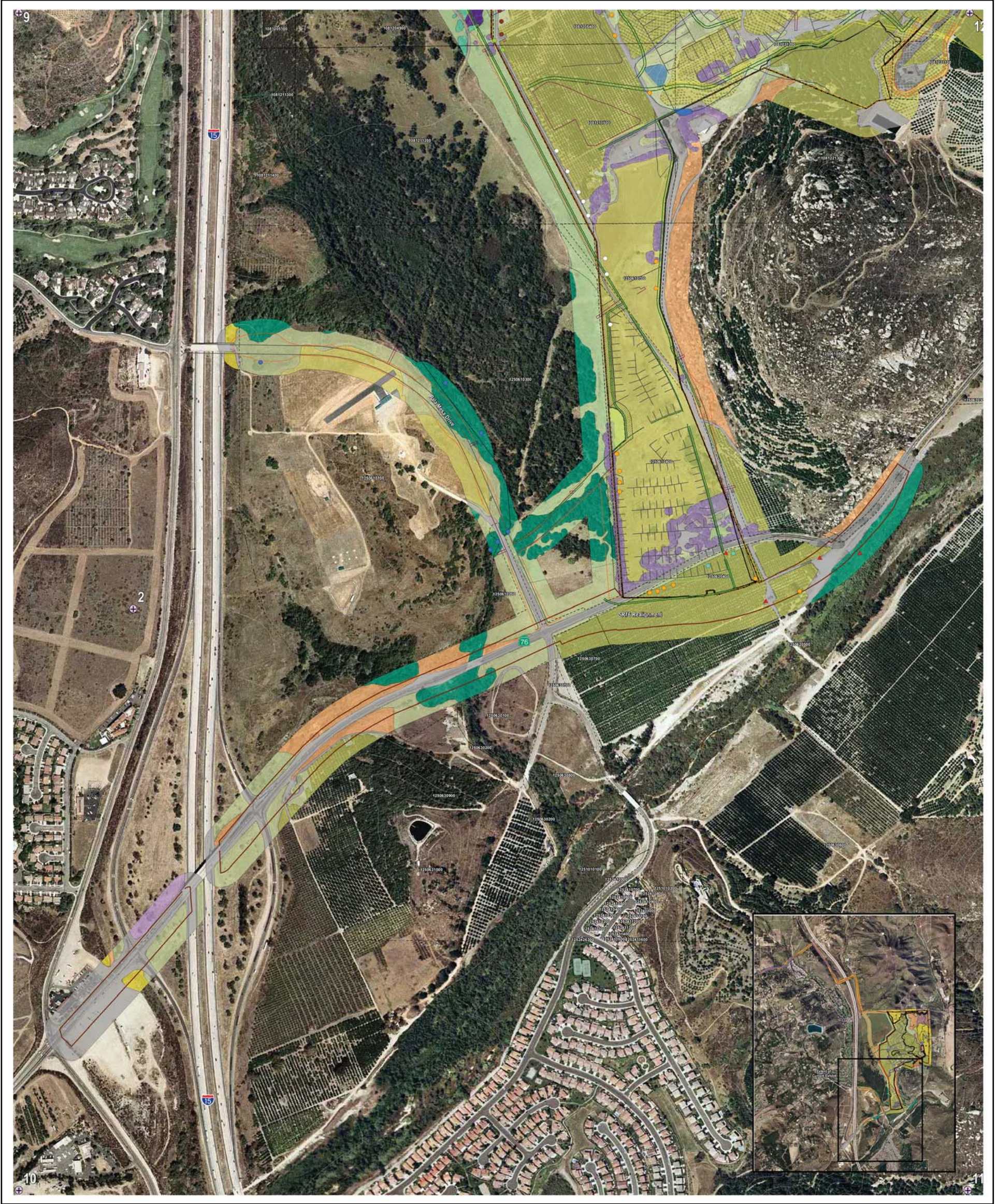


FIGURE 3.1-7a  
Impacts to Biological Resources





0 Feet 410

- |  |  |  |   |  |   |
|--|--|--|---|--|---|
| <ul style="list-style-type: none"><li>Boundary</li><li>On Site Impact Area</li><li>Temporary Impact Area</li><li>Off-site Improvements</li><li>Proposed SR76 Realignment</li><li>Brush Management Zone</li><li>100 foot Wetland Buffer</li><li>50 foot Oak Tree Buffer</li></ul> | <ul style="list-style-type: none"><li>CDFG Wetland</li><li>Corps and CDFG Jurisdiction</li><li>Parcel Boundaries</li><li>Lot Plan</li><li>General Utility/Access Easements</li><li>Access Easements</li><li>Electric Easements</li><li>Storm Drain Easements</li></ul> | <ul style="list-style-type: none"><li>(AG) Agriculture - 18000/18100</li><li>(NNG) Non-native Grassland - 42200</li><li>(CSS) Coastal Sage Scrub - 32500</li><li>(DCSS) Disturbed Coastal Sage Scrub - 32500</li><li>(CHP) Southern Mixed Chaparral - 37120</li><li>(NNT) Non-native Trees - 11000</li><li>(PAS) Pasture - 18310</li></ul> | <ul style="list-style-type: none"><li>(OW) Coast Live Oak Woodland - 71160</li><li>(WMS) Willow and Mulefat Scrub - 63300</li><li>(SAWRP) Southern Arroyo Willow Riparian Forest - 61320</li><li>(SWS) Southern Willow Scrub - 63320</li><li>(FWM) Freshwater Marsh - 52400</li><li>(OWP) Open Water Ponds - 13100</li><li>(DIST) Disturbed - 11000/12000/13000</li></ul> | <ul style="list-style-type: none"><li>Least Bells Vireo (NRC 2007 and 2008)</li><li>Arroyo Toad (Cadre 2003-2007)</li><li>Western Spadefoot (Cadre 2003-2005)</li><li>Orange-throated Whiptail (NRC and Cadre 2003-2006)</li><li>San Diego Coast Horned Lizard (Cadre 2004)</li><li>Two-striped Garter Snake (Cadre 2003-2005)</li><li>Northwestern San Diego Pocket Mouse (Cadre 2003-2005)</li></ul> | <ul style="list-style-type: none"><li>Registration Points</li><li>2 485033 3688581</li><li>9 484790 3689841</li><li>10 484790 3687352</li><li>11 486796 3687352</li><li>12 486800 3689841</li></ul> |
|--|--|--|---|--|---|
- 
- |  |  |  |
|--|--|--|
| <b>Ubiquitous Sensitive Species (On Site)</b> <ul style="list-style-type: none"><li>Coastal Western Whiptail</li><li>San Diego Ringneck Snake</li><li>Coronado Skink</li><li>Turkey Vulture</li><li>Northern Harrier</li></ul> | <b>Ubiquitous Sensitive Species (Off Site)</b> <ul style="list-style-type: none"><li>White-faced Ibis</li><li>Green Heron</li><li>Turkey Vulture</li><li>White-tailed Kite</li><li>Red-shouldered Hawk</li></ul> | <b>Ubiquitous Sensitive Species (Off Site)</b> <ul style="list-style-type: none"><li>Cooper's Hawk</li><li>Barn Owl</li><li>Western Bluebird</li><li>Yellow Warbler</li><li>Yellow Breasted Chat</li></ul> |
|--|--|--|

FIGURE 3.1-7b  
Impacts to Biological Resources





<div></div> Boundary	<div></div> (AG) Agriculture - 18000/18100	<div></div> (NNT) Non-native Trees - 11000	<div></div> (SWS) Southern Willow Scrub - 63320	<div></div> California Gnatcatcher (NRC 2007)	<div></div> Registration Points
<div></div> Off-site Improvements	<div></div> (NNG) Non-native Grassland - 42200	<div></div> (PAS) Pasture - 18310	<div></div> (FWM) Freshwater Marsh - 52400		1 485039 3691072
<div></div> Parcel Boundaries	<div></div> (CSS) Coastal Sage Scrub - 32500	<div></div> (OW) Coast Live Oak Woodland - 71160	<div></div> (OWP) Open Water Ponds - 13100		6 482741 3692785
<div></div> 50-foot Oak Root Zone	<div></div> (DCSS) Disturbed Coastal Sage Scrub - 32500	<div></div> (WMS) Willow and Mulefat Scrub - 63300	<div></div> (DIST) Disturbed - 11000/12000/13000		7 485467 3692792
	<div></div> (CHP) Southern Mixed Chapparral - 37120	<div></div> (SAWRF) Southern Arroyo Willow Riparian Forest - 61320			8 482738 3691006
					13 486800 3699841
					14 483055 3694744
					15 483738 3694744
					16 483057 3693993

Ubiquitous Sensitive Species (On Site)

Coastal Western Whiptail  
San Diego Ringneck Snake  
Coronado Skink  
Turkey Vulture  
Northern Harrier

Red-shouldered Hawk  
Barn Owl  
Southern Cal. Rufous-crowned Sparrow  
Western Bluebird

Ubiquitous Sensitive Species (Off Site)

White-faced Ibis  
Green Heron  
Turkey Vulture  
White-tailed Kite  
Red-shouldered Hawk

Cooper's Hawk  
Barn Owl  
Western Bluebird  
Yellow Warbler  
Yellow Breasted Chat

FIGURE 3.1-7c  
Impacts to Biological Resources



**TABLE 3.1-1  
ON-SITE VEGETATION COMMUNITIES**

Vegetation Community	Acreage
Agriculture (18100)	209.9
Non-native grassland (42200)	31.9
Coastal sage scrub (32500)	56.5
Disturbed coastal sage scrub (32500)	30.6
Southern mixed chaparral (37120)	19.6
Non-native trees (11000)	8.3
Pastureland (18310)	1.5
Coast live oak woodland (71160)	1.7
Mixed willow/Mule fat scrub (63300)	<0.1
Open water ponds (13100)	0.7
Developed/disturbed areas (12000)	28.7
<b>TOTAL</b>	<b>389.5</b>

**TABLE 3.1-2  
ON-SITE VEGETATION COMMUNITY IMPACTS**

Vegetation Community	Existing On-Site	On-Site Permanent Impacts	Preserved On-Site	Impact Neutral	On-Site Temporary Impacts
Agriculture	209.9	162.5	47.4	0.6	0.3
Non-native grassland	31.9	9.9	22.0	2.0	<0.1
Coastal sage scrub/Disturbed coastal sage scrub	87.1	12.6	74.5	2.8	0.2
Southern mixed chaparral	19.6	2.2	17.5	0.0	0.2
Non-native trees	8.3	8.1	0.2	0.0	0.0
Pastureland	1.5	1.5	0.0	0.0	0.0
Coast live oak woodland	1.7	<0.1	1.7	0.0	0.0
Mixed willow/mule fat scrub	<0.1	<0.1	0.0	0.0	0.0
Open water	0.7	0.7	0.0	0.0	0.0
Disturbed/developed areas	28.7	20.3	8.4	0.5	<0.1
<b>TOTAL ACRES</b>	<b>389.5</b>	<b>217.8</b>	<b>171.7</b>	<b>5.9</b>	<b>0.7</b>



**TABLE 3.1-3  
PERMANENT OFF-SITE VEGETATION COMMUNITY IMPACTS**

Off-site Impact	CSS	DCSS	CHP	OW	SWS	SAWRF	FWM	NNG	NNT	S(1)	PAS	AG	DIST	S(2)	Total S{1+2}	Listed Species*
Pala Mesa Drive (Horse Ranch Creek Road to I-15)†	0.01	0.00	0.00	0.00	0.00	2.18	0.00	3.48	0.14	5.81	0.84	1.92	0.85	3.61	<b>9.42</b>	CAGN, LBV
Pankey Road (N. Passerelle boundary to Stewart Canyon Rd.)	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.76	0.00	0.00	3.37	3.37	<b>4.13</b>	CAGN
Horse Ranch Creek Road (N. Passerelle boundary to W. Meadowood site boundary)	0.00	0.00	0.00	0.00	0.68	0.00	0.32	0.00	0.15	1.15	16.69	0.01	0.06	16.76	<b>17.91</b>	CAGN, LBV
Horse Ranch Creek Road East of PA1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.72	0.00	0.21	0.99	1.20	<b>1.92</b>	--
Residential Connection Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.93	<b>0.93</b>	CAGN
Water Tank Access Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.07	1.52	<b>1.52</b>	--
Grading Along Site Edge	0.00	0.01	0.00	0.00	0.27	0.59	0.00	0.36	0.63	1.86	4.46	0.00	0.26	4.72	<b>6.58</b>	CAGN, LBV
2 <sup>nd</sup> CWA Pipeline Preferred	0.31	0.01	0.00	0.20	0.00	0.00	0.00	0.64	0.05	1.21	2.82	0.21	13.43	16.46	<b>17.67</b>	CAGN
Pala Mesa Heights Drive	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.91	0.00	1.03	2.98	0.00	0.51	3.49	<b>4.52</b>	CAGN
<b>TOTAL</b>	<b>1.05</b>	<b>0.84</b>	<b>0.00</b>	<b>0.20</b>	<b>0.95</b>	<b>2.77</b>	<b>0.32</b>	<b>5.39</b>	<b>1.02</b>	<b>12.54</b>	<b>28.72</b>	<b>3.80</b>	<b>19.54</b>	<b>52.06</b>	<b>64.60</b>	<b>--</b>

\*This table lists the off-site impacts associated with the Meadowood Project. Sensitive species listed in the table represent potential impacts to these species.

†These actions may be completed under separate permit applications; however, will be included under this permit in the event that they are not completed prior to construction of the Meadowood project.

Legend

S(1) – total acreage of CSS,DCSS, CHP,OW, SWS, FWM, NNG, NNT

S(2) – total acreage of PAS, AG, DIST

CSS – Coastal Sage Scrub, DCSS – Disturbed Coastal Sage Scrub, CHP – Southern Mixed Chaparral, OW – Oak Woodland, SWS - Southern Willow Scrub, SAWRF – Southern Arroyo Willow Riparian Forest FWM - Freshwater Marsh, NNG – Non-native Grass, NNT – Non-native Trees, PAS – Pasture, AG – Agriculture, DIST – Disturbed/Developed/Graded

CAGN – California Gnatcatcher, LBV – Least Bell's Vireo

**TABLE 3.1-4  
TEMPORARY OFF-SITE VEGETATION COMMUNITY IMPACTS**

Off-site Impact	CSS	DCSS	CHP	OW	SWS	SAWRF	FWM	NNG	NNT	S(1)	PAS	AG	DIST	S(2)	Total S{1+2}	Listed Species*
Pala Mesa Drive (Horse Ranch Creek Road to I-15)†	0.11	0.00	0.00	0.00	0.00	2.00	0.00	1.94	0.07	4.12	0.77	1.26	0.19	2.22	<b>6.34</b>	CAGN, LBV
Pankey Road (N. Passerelle boundary to Stewart Canyon Rd.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	
Horse Ranch Creek Road (N. Passerelle boundary to W. Meadowood site boundary)	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.62	0.00	0.03	0.65	<b>0.67</b>	CAGN, LBV
Horse Ranch Creek Road East of PA1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	--
Residential Connection Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.14	<b>0.14</b>	--
Water Tank Access Road	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	--
Grading Along Site Edge	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.06	0.13	0.32	1.16	.011	0.06	1.33	<b>1.65</b>	LBV
2 <sup>nd</sup> CWA Pipeline Preferred	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	--
Pala Mesa Heights Drive	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.16	0.15	0.00	0.03	0.15	<b>0.31</b>	CAGN
<b>TOTAL</b>	<b>0.11</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>2.13</b>	<b>0.00</b>	<b>2.13</b>	<b>0.20</b>	<b>4.62</b>	<b>2.84</b>	<b>1.37</b>	<b>0.28</b>	<b>4.49</b>	<b>9.11</b>	<b>--</b>

\*This table lists the off-site impacts associated with the Meadowood Project. Sensitive species listed in the table represent potential impacts to these species.

†These actions may be completed under separate permit applications; however, will be included under this permit in the event that they are not completed prior to construction of the Meadowood project.

Legend

S(1) – total acreage of CSS,DSCSS, CHP,OW, SWS, FWM, NNG, NNT

S(2) – total acreage of PAS, AG, DIST

CSS – Coastal Sage Scrub, DCSS – Disturbed Coastal Sage Scrub, CHP – Southern Mixed Chaparral, OW – Oak Woodland, SWS - Southern Willow Scrub, SAWRF – Southern Arroyo Willow Riparian Forest FWM - Freshwater Marsh, NNG – Non-native Grass, NNT – Non-native Trees, PAS – Pasture, AG – Agriculture, DIST – Disturbed/Developed/Graded

CAGN – California Gnatcatcher, LBV – Least Bell's Vireo

**TABLE 3.1-5  
PROJECT IMPACTS TO VEGETATION COMMUNITIES**

Vegetation Community	Existing (On-Site)	Permanent Impacts (On-site)	Permanent Impacts (Off-site)	Mitigation Ratio	Mitigation Required	Preserved (On-Site)	Impact Neutral	Off-site Mitigation
Agriculture	209.9	160.6	3.8	0:1	0.0	49.3	0.6	0.0
Non-native grassland	31.9	9.9	5.4	0.5:1	7.7	22.0	2.0	0.0
Coastal sage scrub (CSS)/Disturbed CSS	87.1	12.6	1.9	2:1	29.0	74.5	2.8	0.0
Southern mixed chaparral	19.6	2.2	0.0	0.5:1	1.1	17.5	0.0	0.0
Non-native trees	8.3	8.1	1.0	0:1	0.0	0.2	0.0	0.0
Pastureland	1.5	1.5	28.7	0.5:1	15.1	0.0	0.0	2.7 <sup>1</sup>
Coast live oak woodland	1.7	less than 0.1	0.2	3:1	0.9	1.7	0.0	0.0
Mixed willow/mule fat scrub	less than 0.1	less than 0.1	0.0	3:1	0.3	0.0	0.0	0.3
Southern willow scrub	0.0	0.0	1.0	3:1	2.7	0.0	0.0	2.7
Southern arroyo willow riparian forest	0.0	0.0	2.8	3:1	8.4	0.0	0.0	8.4
Freshwater marsh	0.0	0.0	0.3	3:1	0.9	0.0	0.0	0.9
Open water	0.7	0.7	0	0:1	0.0	0.0	0.0	0.0
Disturbed/developed areas	28.7	22.2	19.5	0:1	0.0	6.5	0.5	0.0
<b>TOTAL ACRES*</b>	<b>389.5</b>	<b>217.8</b>	<b>64.6</b>		<b>65.8</b>	<b>171.7</b>	<b>5.9</b>	<b>15.0</b>

\* Totals may not add up correctly due to rounding.

<sup>1</sup> Only 4.7 acres of off-site mitigation is needed for pasture due to the amount of non-native grassland preserved on-site.

<sup>2</sup> Impact Neutral is included in the Preserved On-Site total.

**TABLE 3.1-6  
SUMMARY OF IMPACTS TO JURISDICTIONAL WATERS**

Location/ Jurisdiction	Permanent Impacts to Wetlands or Vegetated Riparian	Permanent Impacts to Non-wetland Waters	Permanent Impacts to Isolated Waters	Temporary Impacts to Wetlands or Vegetated Riparian	Temporary Impacts to Non-wetland Waters	Total Impacts to Jurisdictional Waters
On-site						
ACOE	0.14	0.69		----	----	0.83
RWQCB	0.14	0.69	0.06			0.89
CDFG	0.34	0.59	----	----	----	0.93
County	---	----	----	----	----	---
Off-site						
ACOE	2.29	>0.01	----	2.04	>0.01	4.33
CDFG	2.29	>0.01	----	2.04.	>0.01	4.33
County	2.29	----	----	2.04	----	4.33

**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS**

Map Key	Project Name	Year Processed	Coastal Sage Scrub	Chaparral*	Oak Woodlands**	Riparian Habitats***	Other Wetland	Non-native Grassland	Agriculture/Pasture	Eucalyptus Woodland	Biological Impacts Not Specified
1	Meadowood	2009	X	X	X	X	X	X	X	X	
2	Campus Park West	2004	X			X		X	X		
3	Pala Mesa Highlands	2007	X		X		X	X			
4	Tedder TM	1992			X		X				
5	Hukari Subdivision	2007		X	X	X			X		
6	Fulla Fallbrook Ranch	2007	X	X	X				X		
7	Los Willows Inn and Spa	2004			X						
8	Campus Park	In Process	X			X	X	X	X		
10	Bridge Pac West 1 TPM	2006			X	X	X				X
11	Pala Mesa Resort	2007	X								
12	Lung TPM	1999									
13	Chipman TPM	2000			X						
14	Bierman TPM	2000				X					

**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS  
(CONTINUED)**

Map Key	Project Name	Year Processed	Coastal Sage Scrub	Chaparral*	Oak Woodlands**	Riparian Habitats***	Other Wetland	Non-native Grassland	Agriculture/Pasture	Eucalyptus Woodland	Biological Impacts Not Specified
16	Treister TPM	2003	X								
17	Mission Ridge Road TPM	2008	X	X	X			X			
20	Fernandez TPM	2005						X	X		
21	Rabuchin	2005					X				
23	Rosemary Mtn Aggregate Quarry	1997	X	X	X	X					
25	Prominence at Pala	2006	X	X							
26	Palomar College	2007	X			X	X	X			
27	Caltrans SR 76 Realignment	2007	X		X	X	X				
28	San Luis Rey Municipal Water District	2006									X
30	West Lilac Farms	2006			X	X		X			
32	Marquart Ranch	2007	X						X		
34	Ridge Creek Drive	2007	X		X					X	
35	Club Estates	2006						X			
47	De Jong/Pala Minor	1999						X			

**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS  
(CONTINUED)**

Map Key	Project Name	Year Processed	Coastal Sage Scrub	Chaparral*	Oak Woodlands**	Riparian Habitats***	Other Wetland	Non-native Grassland	Agriculture/Pasture	Eucalyptus Woodland	Biological Impacts Not Specified
	Subdivision										
48	Crossroads Investors Minor Subdivision	2008				X					
49	Chaffin TPM	2005	X			X	X				
50	John Collins TPM	2001	X								
51	Brannon Trust TPM	2007	X								
52	Dien N Do TPM	2005	X	X	X			X			
55	Atteberry TPM	1999			X						
56	Johnson TPM	2006					X		X		
58	American Lotus Buddhist Associations TPM	2007	X				X				
59	Reche Road TM	2008									X
63	Cameron Subdivision	1999	X								
65	Aspel TPM	2002	X		X	X					
67	Yew Tree Spring Water Corporation	2003			X	X		X			

**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS  
(CONTINUED)**

Map Key	Project Name	Year Processed	Coastal Sage Scrub	Chaparral*	Oak Woodlands**	Riparian Habitats***	Other Wetland	Non-native Grassland	Agriculture/Pasture	Eucalyptus Woodland	Biological Impacts Not Specified
68	Haugh, Granger TPM	2007	X			X					
69	Brown, Lee, and Karen TPM	2007	X				X	X			
71	Surf Properties TPM	2007			X		X				
72	Brook Hills TM	1993									X
73	Latter Day Saints Via Monserate	2002					X				
74	Leeds and Strauss	2001	X					X			
77	Crook TPM	2001									X
78	Tabata TM	2004							X		X
81	Sumac TPM	2007									X
85	Woodhead TPM	2001							X		X
89	Sanders TPM	2004							X		X
91	Monserate TM	2006									X
93	Madrigal TPM	2006									X
94	Orange Grove Power Plant	2007	X								X
95	Gregory Landfill	In process	X	X	X		X	X			



**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS  
(CONTINUED)**

Map Key	Project Name	Year Processed	Coastal Sage Scrub	Chaparral*	Oak Woodlands**	Riparian Habitats***	Other Wetland	Non-native Grassland	Agriculture/Pasture	Eucalyptus Woodland	Biological Impacts Not Specified
100	Valentine Trust	2006			X					X	
104	Aguilar TPM	1998	X	X	X						
108	Bonsall Subdivision	2005	X					X			
110	VandeVegte TM	2005									X
111	Brook Forest	2001	X		X	X	X	X	X		
112	Choi TM	2001	X			X		X			
113	Oak Glen	2006			X				X		
116	Rabbit Run	2006									X
117	Froehlich TM	2006	X						X		
118	White Fox Run TPM	2005	X		X		X	X			
119	Baldwin TM	2006	X	X	X	X		X			
121	Orchard Vista TM	2006	X					X	X		
123	Pepper Tree Park	2005					X				
125	Uchimura TM	2003									X
126	Lash TM	2002						X			X
127	Heritage Homebuilders TM	1993			X	X					

**TABLE 3.1-7  
CUMULATIVE PROJECTS IMPACT ANALYSIS  
(CONTINUED)**

<b>Map Key</b>	<b>Project Name</b>	<b>Year Processed</b>	<b>Coastal Sage Scrub</b>	<b>Chaparral*</b>	<b>Oak Woodlands**</b>	<b>Riparian Habitats***</b>	<b>Other Wetland</b>	<b>Non-native Grassland</b>	<b>Agriculture/Pasture</b>	<b>Eucalyptus Woodland</b>	<b>Biological Impacts Not Specified</b>
128	Kesonovich TM	1989			X						
136	Hormuth TPM	1999			X						
137	Arkeder TPM	2002			X	X					
138	Amos Family Trust TPM	2001	X		X		X				
139	White TPM	2001	X				X				
140	Heritage Oaks TPM	1999			X						
142	Zebu TPM	2001	X		X						
143	Compton TPM	2004	X		X	X					
149	Pacifica Estates	2006	X				X	X			
155	Ferraro TPM	2004				X		X			
156	Palomar Dr. Subdivision	2005	X			X	X	X			
159	Golf Green Estates	2006					X				
161	The Crest	2003	X				X	X			

## 3.2 **Agricultural Resources**

The purpose of this section is to describe agricultural resources on the Project Site and in the Proposed Project vicinity and to identify any impacts that are likely to result with Proposed Project implementation. Impacts are assessed on the basis of existing agricultural resources and applicable policies. This section is based on the agricultural technical report for the Proposed Project area (RECON 2009). The technical report is included as Appendix G to this EIR.

### 3.2.1 **Existing Conditions**

#### ***Regulatory Framework***

**San Diego County General Plan** - The San Diego County General Plan (1996) is a comprehensive planning guide for unincorporated areas within the county. Related agricultural policies within the Regional Land Use, Open Space, and Conservation Elements, as well as the Fallbrook Community Plan, are summarized below:

1. **San Diego County General Plan, Regional Land Use Element** - The Regional Land Use Element regional categories for the Proposed Project area are SSA and RDA. The SSA designation is applied on an interim basis and for a specified period of time to areas in which development should be suspended or restricted pending completion of detailed review, study, or annexation to the County Water Authority. Lands within the RDA designation are outside the service boundaries of the County Water Authority. Areas within the RDA category are intended for agriculture or unimproved lands and remote pockets of residential development. The Proposed Project site is designated as an RDA since it is outside the County Water Authority boundary line. However, the Proposed Project would redesignate the entire site as CUDA.
2. **San Diego County General Plan, Open Space Element** – It is the intent of the County General Plan Open Space Element to encourage the establishment of additional agricultural preserves and open space easements based on a systematic review of appropriate areas. Specifically, Section 2, Goal II(1) and (6) of the Element encourages “agricultural use of lands with soils which are highly suitable for the production of food or fiber” and “the use of agriculture to provide visually pleasing open space and variety within an urban environment.”

Agricultural preserves have been established throughout the county, which provide valuable open space. Procedures for acquiring agricultural preserves and open space easements are defined in San Diego County Board of Supervisors Policies I-38 and I-37, respectively.

3. **San Diego County General Plan, Conservation Element** – Policies and Action Programs related to agriculture in the Conservation Element include conducting an annual inventory of areas with high agricultural potential (including an assessment of the annual gain or loss of agricultural lands), amending the General Plan to include an Agriculture Element, identifying and implementing efforts to preserve agriculture (e.g., encouraging additional preserves and publicizing the wildlife habitat preserve provisions of the Williamson Act), and incorporating the most detailed soil data available in environmental analyses.

The definition of agricultural lands is not based solely on soil characteristics. The Conservation Element states that “the topic of soil is complex. The physical properties of soil are not necessarily the principal factor determining the agricultural suitability of a particular area. Climatic conditions, water availability, drainage, taxes, and land development pressures are equally important.”

4. **Fallbrook Community Plan** – Fallbrook has a unique village atmosphere characterized primarily by low-density residential development and agriculture. The general goal is to perpetuate the existing rural charm and village atmosphere while accommodating growth in such a manner that it will complement the environment of Fallbrook. The Fallbrook Community Plan designates the Project Site as (21) Specific Plan and (18) Multiple Rural Use.

**California Department of Conservation, Division of Land Resource Protection’s Farmland Mapping and Monitoring Program (FMMP)** - The goal of the Farmland Mapping and Monitoring Program (FMMP) is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California’s agricultural land resources. FMMP produces *Important Farmland Maps*, which are a hybrid of resource quality (soils) and land use information. Agricultural lands are rated according to soil quality and irrigation status, with Important Farmland maps updated every two years based on aerial photograph review, computer mapping analysis, public input, and field reconnaissance.

**California Land Conservation (Williamson) Act** - The California Land Conservation Act of 1965, better known as the Williamson Act (California Administrative Code §51200 et. seq.), creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value, which saves landowners from 20 percent to 75 percent in property tax liability each year. Contracts issued under the Williamson Act automatically renew each year for a new 10-year period, unless the landowner files a notice of non-renewal to terminate the contract at the end of the current 10-year period. During the 10-year cancellation period, property taxes are gradually raised to the appropriate level for developable land.

**County Board of Supervisors Policy I-38** – The County Board of Supervisors is committed to supporting and encouraging farming in San Diego County through establishment of partnerships with landowners and other stakeholders to identify, secure, and implement incentives that support the continuation of farming as a major industry in San Diego. Specific elements of this policy include criteria for preserve establishment (e.g., eligibility and size), terms (i.e., contract duration), renewal/non-renewal and cancellation, as well as provisions for implementing eminent domain and fee/tax schedules.

**San Diego County Agricultural Enterprises and Consumer Information Ordinance, §63.401 et seq.** - This ordinance recognizes that the commercial agricultural industry in the county of San Diego is a significant element of the County's economy and a valuable open space/greenbelt resource for San Diego County residents. The ordinance also recognizes that a majority of agricultural operations within the county are family operated, and are located throughout the unincorporated area. To further this purpose,

this ordinance recognizes that conflicts can occur between agriculture and certain other land uses; and it defines and limits the circumstances under which agricultural enterprise activities, operations, and facilities constitute a nuisance. The ordinance requires that sellers of real property in unincorporated areas inform prospective buyers that the property could potentially be near an agricultural operation and may experience related inconveniences, irritations, and discomforts. These conditions include, but are not limited to, noise, odors, dust, insects, rodents, and chemicals.

**San Diego LAFCO Policy L-101.** – LAFCO's adopted procedures are required to consider how spheres of influence or changes of local governmental organization could affect open space and prime agricultural lands. According to Policy L-101, LAFCO should:

1. Discourage proposals that would convert prime agricultural or open space lands unless that action would not promote the planned, orderly, and efficient development of an area or the affected jurisdiction has identified all prime agricultural lands within its sphere of influence and adopted measures that would effectively preserve prime agricultural lands for agricultural use;.
2. Require pre-zoning of territory (city only) to identify areas subject to agricultural preservation/planned development; and
3. Adhere to San Diego LAFCO's adopted procedures to define agricultural and open space lands and to determine when a proposal may adversely affect such lands.

### ***Existing On-site Agricultural Land Uses***

Approximately 209.9 acres of the Project Site is currently and has historically been committed to various agricultural activities, with extensive areas supporting citrus and avocado groves occupying the lower and mid-portions of ridges and slopes in the central portion of the Project Site. These areas are irrigated and the trees are maintained by periodic trimming, pruning, and replanting. The southern portion of the Project Site is used to grow seasonal crops (Figure 3.2-1).

### ***Land Use Designations and Zoning***

As described above, the Proposed Project is currently within both a SSA and RDA on the Regional Land Use Element Map. The Fallbrook Community Plan designates the Proposed Project as (21) Specific Plan and (18) Multiple Rural Use. The current zoning in the designated (21) Specific Plan Area is S90, Holding Area Use Regulation. The current zoning in the designated (18) Multiple Rural Use area is A70, Limited Agriculture (Figure 3.2-1).

### ***Williamson Act Contract Lands***

The Project Site is not currently nor has been historically within a designated Agricultural Preserve or Williamson Act Contract. A Williamson Act Contract occurs on the McCarthy Family Trust land (Williamson Act Contract #75-60; Preserve #15). This land is located

approximately one mile southeast of the Project Site and south of the San Luis Rey River (Figure 3.2-2).

### ***Surrounding Agricultural Land Uses***

East of I-15 and north of SR-76, the surrounding land has been developed with citrus and avocado groves, and scattered rural homes. The Campus Park and Campus Park West projects are proposed immediately adjacent to the Project Site on the west. There is an agricultural operation (Fritz Family property) occupying most of the relatively flat canyon floor to the east of Rice Canyon Road, northeast of the Project Site. This operation primarily grows truck crops. Avocado groves exist to the east.

Pala Rey Ranch (McCarthy Family Trust Land) lies south of the Project Site, south of SR-76, and on both sides of Couser Canyon Road. The ranch headquarters is surrounded by a pasture holding beef cattle. The small roadside Pala Rey Ranch produce stand is located on the south side of SR-76 just east of Couser Canyon Road. The San Luis Rey Ranch (McCarthy Family Trust Land) is located to the east and west of Couser Canyon Road (see Figure 3.2-2).

### ***Farmland Mapping and Monitoring Program***

As described above, the FMMP is implemented by the California Department of Conservation (CDC), Division of Land Resource Protection and recognizes the suitability of land for agricultural production. The FMMP is non-regulatory and was developed to inventory land and provide categorical definitions of important farmlands to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources.

Figure 3.2-3 shows the most recent farmland data within the Project Site and surrounding area (CDC 2006). Table 3.2-1 depicts the approximate acreage for each of the FMMP categories within the Project Site and shows them as a percentage of the total Proposed Project area. According to the Important Farmlands Inventory Map, the Project Site includes the following farmland classifications: Unique Farmland, Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land and Other Land.

**TABLE 3.2-1  
ACRES OF FMMP FARMLAND ON-SITE AND  
AS A PERCENT OF THE ENTIRE PROJECT AREA**

Category	Total Acres	Total Percent of Project Area
Farmland of Statewide Importance	54.2	13.9
Farmland of Local Importance	43.1	11.3
Grazing Land	136.3	35.0
Other Land	1.0	0.2
Prime Farmland	6.3	2.9
Unique Farmland	147.6	37.9
<b>TOTAL</b>	<b>389.5</b>	<b>100.0</b>

### ***Crop Suitability***

Crop suitability depends on a combination of soil, water, and climate resources. Based on an assessment of these resources in the agricultural report, it was concluded that portions of the Proposed Project area are suited to the production of avocados, citrus, and other frost-sensitive crops. These crops are suited to grow on the steep slopes that are less susceptible to the frost, which usually settles within the valleys. Citrus is less sensitive to frost and slow permeability than avocados, but is more difficult to manage on steeper slopes.

### ***Agricultural Interface***

Various agricultural land uses exist in the Proposed Project vicinity. The nearest agricultural operations consist primarily of citrus groves, avocado groves, and indoor and outdoor flower crops. These agricultural operations and uses likely perform all or some of the following: cultivation; plowing; spraying; pruning; harvesting; and drying; which may generate dust, smoke, noise, pests (i.e., insects, rodents, etc.), odor, and the use of pesticides.

## **3.2.2 Guidelines for the Determination of Significance**

For the purpose of this EIR, the identified significance thresholds are based on criteria provided in Appendix G of the State CEQA Guidelines, the California Agricultural Land Evaluation and Site Assessment (LESA) Model, and existing planning/zoning documents and legislation (i.e. the County Zoning Ordinance and the Williamson Act).

A significant impact to agricultural resources would occur as a result of project implementation if:

1. The project will convert CDC designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.
2. The project would place or establish non-permitted uses in existing agricultural zones or on Williamson Act contract lands.
3. The project will involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.
4. The project will conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

## **3.2.3 Analysis of Project Effects and Determination as to Significance**

### ***Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Guideline 1)***

A project would result in a significant impact if it would convert CDC designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to non-agricultural use.

The Project Site's agricultural resources have been designated by the CDC as follows: 6.3 acres as Prime Farmland; 147.6 acres as Unique Farmland, and 54.2 acres as Farmland of Statewide Importance. Approximately 209.9 acres of the Project Site are in active agricultural uses, primarily citrus and avocado groves. Development of the Proposed Project would convert approximately 160.6 acres to residential uses. An additional 3.8 acres of agriculture would be removed to accommodate off-site improvements.

The California LESA Model was used to assess the importance of agricultural resources on the Project Site. The use of this model is based on the associated California Agricultural LESA Model Instruction Manual (CDC 1997). This manual, pursuant to Appendix G of the CEQA Guidelines, is specifically intended to "provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process." Application of the LESA Model includes a two-prong analysis based on a Land Evaluation (LE, i.e. on-site soils) and a Site Assessment (SA, i.e. project size, and water resources) to produce a numerical score for site-specific agricultural impacts. A project is considered to be an important resource under the LESA Model if the total LESA Model score is greater or equal to 40 points, and the subscores for the LE and SA segments are each greater than or equal to 20 points. The specifics for the LESA Model used for the Proposed Project are detailed in Table 3.2-2 and Appendix G. As shown in Table 3.2-2, while the overall LESA Model score for the Project Site is 40.8 and the SA subscore is 27.8 points, the LE subscore is 13 points. According to the LESA Model, this score means that the Project Site does not represent a significant agricultural resource because the LE subscore is less than 20. The LESA model requires that both the LE and the SA subscores are greater than 20 for the site to be considered a significant agricultural resource.

**TABLE 3.2-2  
FINAL LESA SCORESHEET**

Factor Name	Factor Rating	Factor Weighting	Weighted Factor Rating
Land Capability Classification	27.75	0.25	6.9
Storie Index Rating	24.34	0.25	6.1
Total LE Subscore			13.0
Project Size	80	0.15	12.0
Water Resource Availability	45.2	0.15	6.8
Surrounding AG Lands	60	0.15	9
Protected Resource Lands	0	0.05	0
Total SA Subscore			27.8
TOTAL LESA SCORE			40.8 Not Significant*

\* For total LESA scores of 40-59 - Considered significant only if LE and SA subscores are each greater than or equal to 20 points.

In addition to consideration of the LESA Model findings for a determination of significance, the conversion of Important Farmland Categories is considered in the determination of significance of direct impacts to agriculture. Table 3.2-1 and Figure 3.2-3 show the acreages of Important Farmland Categories on-site. Approximately 136.3 acres of the north and northeastern portion of the Project Site are considered grazing lands, according to the FMMP. This area may have supported limited grazing in the past,



but is presently primarily native vegetation. Approximately 147.6 acres of the central portion of the Project Site is considered Unique Farmland, primarily where avocado production has occurred. Approximately 54.2 acres along the central western portion of the Project Site where citrus crops have been grown is considered Farmland of Statewide Importance. The remainder of the site is classified as Farmland of Local Importance (approximately 43.1 acres), Other Land (approximately one acre) and a small portion of the site (approximately 6.3 acres) is categorized as Prime Farmland. Based on the project design, the Proposed Project would directly impact 160.6 acres of the Project Site's agricultural uses and farmland designations either through development impacts or impacts from placing biological restrictions over portions of the property. Many of these lands contain quality agricultural soils as defined by the FMMP. Therefore, the impacts related to the conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance to non-agricultural uses on- and off-site is considered a **significant impact (AG-1)**.

***Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract (Guideline 2)***

A project would result in a significant impact if it would place or establish non-permitted uses in existing agricultural zones or on Williamson Act contract lands.

Implementation of the Proposed Project would result in the development of residential properties in an area with generally diverse and intensive agricultural uses but also features non-agricultural uses (i.e. single-family residences and a quarry operation). This scenario has the potential to generate interface conflicts with nearby agricultural resources, including several existing and potential agricultural operations and designations (i.e. currently undeveloped properties zoned for agriculture). The current zoning in the designated (21) Specific Plan Area is S90, Holding Area Use Regulation. The current zoning in the designated (18) Multiple Rural Use area is A70, Limited Agriculture. Sites immediately adjacent to the Project Site are currently zoned: A70; A72; and S90; supporting primarily limited agricultural uses and residential land uses. Rosemary Mountain is also zoned for agricultural uses (A70).

As part of the Proposed Project, the Regional Land Use Map is proposed to be amended to change the designation on the Project Site from SSA and RDA to CUDA. The CUDA category is intended for near-term urban development. In addition, the Fallbrook Community Plan is proposed to be amended to change the site from (21) Specific Plan and (18) Multiple Rural Use to (21) Specific Plan for the entire project site. This would allow for the preparation of a Specific Plan Amendment with a density of 2.3 units per acre resulting in a maximum of 886 dwelling units.

Current zoning in the Multiple Rural Use area is Limited Agriculture, A70. The Proposed Project would rezone the entire site to the S-88 Specific Planning Area Use Regulation. The proposed rezoning would not represent a significant impact to agriculture because it would not result in any conflicts with zoning for agricultural use. In San Diego County, agriculture is allowed in any zone and there are no exclusive agricultural zones. The proposed specific plan amendment and rezone would make the site's zoning consistent with proposed use, while continuing to allow agriculture in the agricultural open space areas and within residential lots where parcel sizes can accommodate agriculture. Therefore, the Proposed Project would not conflict with existing zoning and impacts would be **less than significant**.

There are no Williamson Act contract lands within or adjacent to the Project Site. A Williamson Act contract parcel is located approximately one mile to the southeast of the Project Site. Active agricultural uses occurring on this Williamson Act Contract land would not be directly affected by Proposed Project implementation because of the one mile separation between the contract land and the Proposed Project; therefore, impacts would be **less than significant**.

***Involve Other Changes in the Existing Environment (Guideline 3)***

A project would result in a significant impact if it would involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use.

The Proposed Project would place non-agricultural uses adjacent to farmland, as depicted in Figure 3.2-2. As discussed above, active farming exists on neighboring properties. The site of the proposed Campus Park development to the west maintains cattle grazing. Sites to the south and east of the Project Site support ongoing field crop and citrus operations. Agricultural practices on adjacent farmland may involve non-fumigant type pesticide/herbicide use and other typical crop management activities on a regular basis for pest and weed control. Typical agricultural activities can generate noise, dust, and odors and could be viewed as nuisance generating to non-agricultural neighbors. Each of these changes increases the farming costs at the adjacent farmland properties. Land use conflicts between agriculture and non-agricultural land uses can result in the conversion of agriculture to non-agricultural uses.

Other indirect impacts of farmland conversions could result from edge effects. For example, residents from the Proposed Project may trespass, pilfer crops, or damage farm equipment. The pressure, inconvenience, and increased costs of operating the adjacent farm may render continued farming infeasible, or at least heighten the attractiveness of selling the farm for development. If this were to occur, eventually another indirect conversion could result from leapfrog or non-contiguous development pattern. Development approvals result in the grouping of viable agricultural parcels between urban land uses, and the likely continuation of urban expansion often results in the conversion of the farmland area.

However, the Proposed Project would not result in significant impacts related to agricultural land use conflicts because the following design features are incorporated into the Proposed Project to assure adequate buffers from proposed on-site structures and off-site agricultural uses.

1. To preserve on-site agricultural resources, the Proposed Project shall provide 49.3 acres of agricultural open space for the continued growth of citrus and avocado groves.
2. The Proposed Project shall provide an open space and agricultural buffer between the development footprint and the agriculture within Rice Canyon to the east. The buffer would prevent residential development from being located adjacent to active agricultural operations. This buffer is comprised of the 49.3 acres of agricultural open space and 122.4 acres of natural open space that would be preserved as shown on the VTM; and which would be a minimum of 1,000 feet and up to approximately 2,500 feet at it's widest.

3. A landscape buffer between the agricultural open space and the on-site residential areas shall be implemented to provide additional buffering. The landscaped buffer would be a 100-foot-wide area.

The combined agricultural open space, natural open space, and proposed landscaping would increase agricultural compatibility and minimize the potential for off-site and on-site agricultural activities to be nuisance generating. The buffers would be effective because the groves provide a visual and spatial buffer between the Proposed Project development and off-site agricultural operations. In addition, required disclosure statements pursuant to the San Diego County Agricultural Enterprises and Consumer Information Ordinance would also ensure future residents are made aware of the potential for farming activities in the area and the ongoing rights of existing agricultural operations.

Therefore, impacts related to changes which could result in conversion to non-agricultural uses would be **less than significant**.

***Conflict with Applicable Plan, Policy, or Regulation (Guideline 4)***

A project would result in a significant impact if it would conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

**California Land Conservation (Williamson) Act** - There are no Williamson Act contract lands within the Proposed Project. As discussed, there is a Williamson Act contract located approximately one mile to the southeast of the project site. Although there are active agricultural uses occurring on the Williamson Act Contract land, potential indirect and cumulative impacts to agriculture (including the Williamson Act parcel) associated with the implementation of the Proposed Project were found to be less than significant. Therefore, the Proposed Project is consistent with this regulation.

**San Diego County General Plan Policies** - The San Diego County General Plan (1996) contains several policies that relate to agriculture in some way, such as land use, open space, and conservation as discussed below:

**San Diego County General Plan, Regional Land Use Element** – The land use designations for the entire site are proposed to be changed to (21) Specific Plan. A portion of the site that is currently designated (18) Multiple Rural Use would change to (21) Specific Plan. Neither the existing nor proposed land use designations include policies for the protection of agriculture; the (18) Multiple Rural Use category also indicates that the designation is applied in areas “not highly suited for intensive agriculture”. As no land use designations preclude avocational agriculture on individual residential lots (i.e., small orchards on individual lots), the proposed change in land use designation would not present a conflict with agricultural policies.

**San Diego County General Plan, Conservation Element** – The Conservation Element promotes agriculture through such goals as conducting annual inventories of areas with high agricultural potential, encouraging new Williamson Act Contracts, identifying and implementing efforts to preserve agriculture, and incorporating the most detailed soil data available in environmental analyses. These goals and policies are primarily related

to encouraging new agricultural uses or managing existing uses. As there are no Williamson Act Contracts on-site and the Proposed Project has evaluated the potential agricultural impacts including an assessment of soil resources, the Proposed Project is not in conflict with the goals and policies of the Conservation Element. Furthermore, the Proposed Project's inclusion of 49.3 acres of agricultural open space would ensure on-site agriculture is retained and therefore, the Proposed Project would not present a conflict with agricultural policies.

**San Diego County General Plan, Open Space Element** – The Open Space Element policies in relation to agriculture are those that encourage directing development away from the most productive agricultural areas; minimizing conflicts between agricultural and non-agricultural areas due to developing residential uses within agricultural areas; and minimizing conflicts between agricultural and residential uses due to agricultural-related nuisances and hazards such as chemical applications, and the generation of noise, dust, odors, and pests. Potential impacts associated with the Proposed Project in all of these areas have been discussed throughout this section and were found to be less than significant or reduced to below a level of significance through project design measures and/or mitigation measures. Therefore, the Proposed Project does not conflict with agricultural goals and policies of the Open Space Element.

**San Diego County Agricultural Enterprises and Consumer Information Ordinance** - This ordinance recognizes that the commercial agricultural industry in the county of San Diego is a significant element of the county's economy and limits the circumstances under which agricultural activities may constitute a nuisance. The ordinance includes requirements such as providing noticing to prospective buyers in rural areas that agricultural activities may take place within the vicinity and that there are associated inconveniences, irritations, and discomforts that may occur as a result. As discussed above, there are agricultural operations occurring within the vicinity of the Proposed Project, such as the cattle grazing to the west and the field crop operations occurring to the east and south. As required by the ordinance, notice to prospective homebuyers will be provided to notify future residents that agricultural uses exist in the vicinity of the project and that these uses maintain certain rights to practice agriculture in accordance with normal and accepted practices.

**San Diego LAFCO Policy L-101-** As described above, LAFCO's directive is to disapprove actions that would convert prime agricultural or open space lands unless that action would "not promote the planned, orderly, and efficient development of an area."

The Proposed Project would convert agricultural lands, including 6.3 acres of Prime Agricultural Land within the Project Site to non-agricultural uses. While this conversion would be less than significant based on the LESA Model analysis performed for the Proposed Project (Appendix G), it would be considered an adverse affect, as defined by LAFCO's adopted procedures. The finding of an adverse affect on Prime Agricultural Land requires additional analysis to determine whether the conversion would promote the "planned, orderly, and efficient development of an area."

In order to evaluate whether the conversion would promote the "planned, orderly, and efficient development of an area" it is necessary to examine the planning context within the Proposed Project area. This issue is discussed in detail in Chapter 1.8, Growth Inducing Effects and 4.1.1, Land Use. In summary, the Project Site is located within the northeastern quadrant of the intersection of I-15 and SR-76, an area which has been

planned as a primary location for future growth. This area has been identified by the SANDAG Smart Growth Concept Map as a potential Special Use Center smart growth area. Additionally, because of its location at this strategic intersection, this quadrant became a logical node of future development as identified in the County's Draft General Plan Update. The Draft General Plan Update Land Use Plan designates the portions of the Project Site planned for development as Village Residential and the Proposed Project is consistent with the land uses and densities envisioned in the Draft General Plan Update. Finally, the Project Site is adjacent to the approved Palomar College Campus development site and other properties proposed for development (Campus Park and Campus Park West). Therefore, the Proposed Project would promote the planned, orderly, and efficient development of the area, in compliance with LAFCO Policy L-101. In conclusion, no conflicts with plans and policies related to agriculture have been identified and associated impacts would be **less than significant**.

### 3.2.4 Cumulative Impact Analysis

The guidelines for determining the significance of cumulative impacts are based on the same guidelines used to determine project-level impacts, except that the analysis considers the cumulatively considerable effects of impacts from the Proposed Project in association with other projects within the agricultural cumulative study area. As the Proposed Project is not located on or adjacent to any Williamson Act Contract, there is no potential for the Proposed Project to contribute to a cumulative project impacted related to Williamson Act Contract lands and no further cumulative analysis of this issue is included.

A modified version of the CEQA cumulative study area was used for the following evaluation, with the agricultural cumulative study area shown in Figure 10 of Appendix G and a list of projects with a summary of project features and agricultural resources is provided in Table 5 of the agricultural report (Appendix G). This area was generated on the basis of the following considerations: (1) applicable cumulative project locations relative to the Project Site; (2) the presence of agricultural activity or designations; (3) agricultural resource potential (e.g. the presence of high quality soils); (4) physical barriers to contiguous agricultural uses such as steep or rocky terrain, and (5) cultural barriers to contiguous agricultural use such as major roadway corridors or substantial urban development. Specifically, the referenced analysis of cumulative projects identified related impact totals for agricultural resources including cattle grazing, mixed use orchards, greenhouse operations, nurseries, filed crops, vineyards, apiary sites, and CDC Prime Farmland, Unique Farmland and Farmland of Statewide Importance. A summary of cumulative impacts associated with the identified cumulative study area and project list is provided below.

The cumulative impact analysis is based on a review of the projects in the cumulative study area and their potential to directly and indirectly convert agricultural resources to a non-agricultural use. The following projects that could potentially have a cumulative impact on agricultural resources within the cumulative impact study area:

- TM 5338 (SP83-01) Campus Park (Passerelle) – This project proposes 1,084 residential units on 417 acres as well as retail space, offices, a sports complex and a neighborhood park. Approximately 85 acres of the Campus Park site are now owned by Palomar College, who plans to construct a new campus to serve 12,000 students. There are no Williamson Act contracts on the site, and the CDC

Important Farmland designations on-site are Farmland of Local Importance and Other. The site contains 176 acres that is zoned A-70 and used for cattle grazing.

- TM 5424 (PAA 04-003) - Campus Park West (Pappas) – The Campus Park West project is located adjacent to Campus Park West (Passerelle), approximately 0.5 mile west of the Proposed Project, and is an amendment to the previously approved 442-acre Specific Plan for Campus Park (Passerelle). The 118.5-acre project site proposes 369 residential units, commercial and office uses, a park, and open space. The project site contains Farmland of Local Importance. There are no Williamson Act Contracts within the project area. There is a small (approximately 10 acres) area of the site that was previously farmed, but which is reverting back to native vegetation. Based on field reconnaissance and a review of aerial photos, it was determined that there is no active agriculture on-site.
- Fallbrook Ranch, TM 5532 is an 11 lot subdivision at 2365 S. Old Highway 395 that contains Unique Farmlands and old orange groves. The project may impact approximately 12.8 acres of agricultural land.
- Dimitri, Diffendale, and Kirk, is a 4 lot minor subdivision, TPM 21075, located south of Monserate Hill Road. The property supports 10 acres of groves.
- The Monserate minor subdivision, TPM 21156 located at 3624 Monserate Hill Road has approximately 19 acres of groves.
- Sumac minor subdivision, at Sumac Road, TPM 21076 has approximately eight acres of agricultural land.
- Fernandez minor subdivision has approximately four acres of agricultural land (groves).
- Tedder Subdivision impacted approximately 13 acres of agricultural land. The site is now graded, but previously supported groves.
- Bridge Pac West contains Unique Farmland and Farmland of Local Importance. Although not actively farmed, it is considered farmland. Due to the large size of parcels proposed, it is assumed approximately five acres of the 15.9 would likely be impacted since agriculture would remain viable on larger lots.

Overall, impacts to agricultural land within the cumulative study area would result in the loss of approximately 485 acres of farmland representing a cumulative impact. The Proposed Project would account for the loss of 164.4 acres (160.6 on-site and 3.8 acres off-site). This contribution to the cumulative loss of agricultural resources would be considered a **significant impact (AG-2)**.

### **3.2.5 Mitigation Measures Proposed to Minimize the Significant Effects**

**M-AG-1/M-AG-2** The Proposed Project shall retain 49.3 acres of existing citrus and avocado groves in agricultural open space.

### 3.2.6 Conclusion

The Proposed Project includes development of up to 886 residential units in the Fallbrook Community Plan area, which has agricultural resources. The LESA Model analysis prepared for the Proposed Project resulted in a score, which indicates that conversion of these agricultural resources would be considered less than significant; however, implementation of the Proposed Project would result in direct impacts to 6.3 acres of Prime Farmland, 99.9 acres of Unique Farmland, and 54.2 acres of Farmland of Statewide Importance. The conversion of this agricultural land to non-agricultural uses represents a significant impact (AG-1). M-AG-1 requires the creation of a 49.3-acre agricultural open space for the continued growth of citrus and avocado groves. Implementation of this mitigation measure would allow the continued viability of agricultural resources on the Project Site. With implementation of this mitigation measure, Impact AG-1 is reduced to a level that is less than significant.

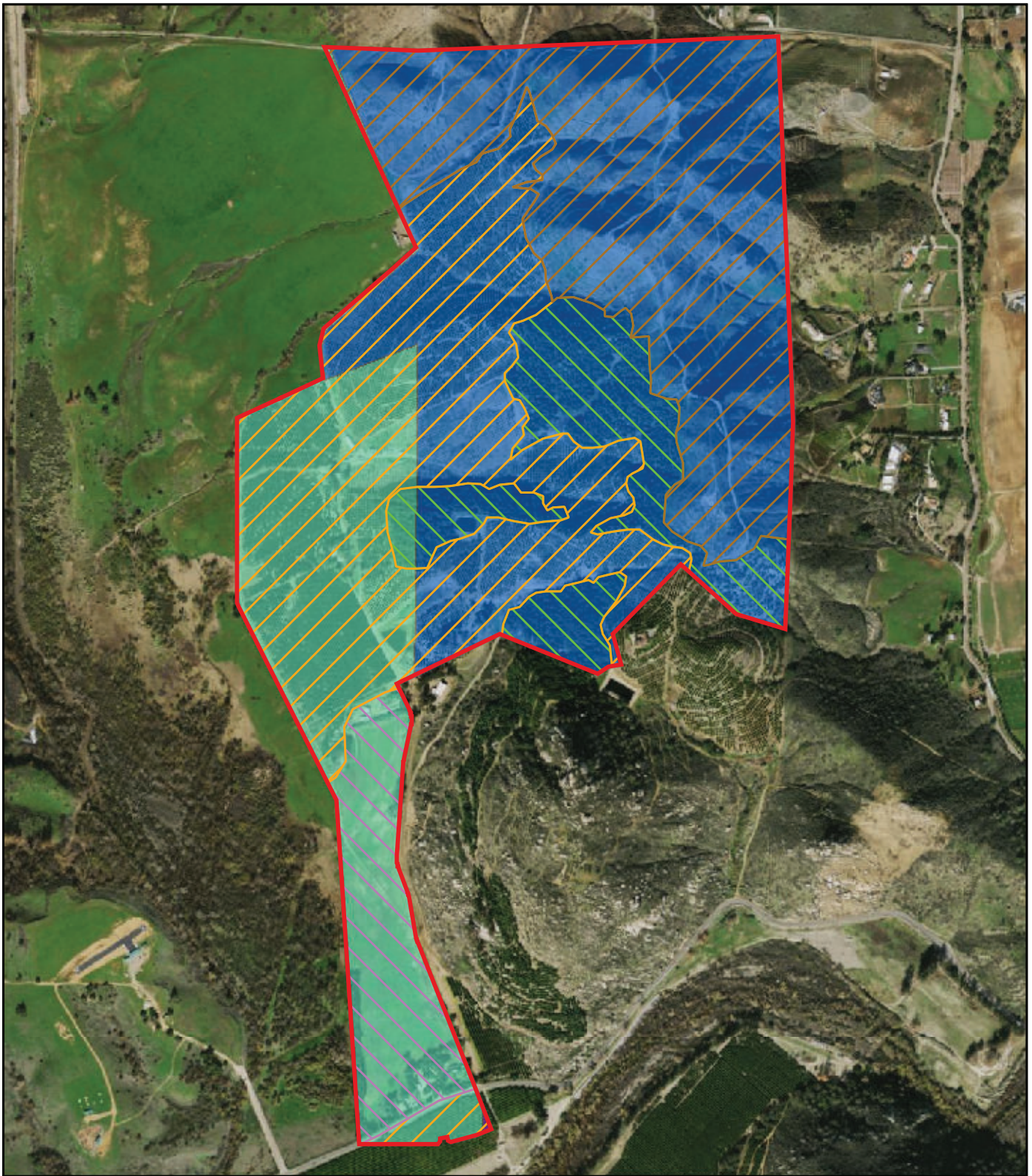
The Proposed Project could result in “edge effect” impacts to adjacent agriculture as a result of the incompatibility of residential uses within agricultural areas. These impacts are reduced through the implementation of project design measures including the creation of an agricultural buffer. This buffer is comprised of the 49.3-acre agricultural open space and 122.4 acres of natural open space, which would be a minimum of 1,000 feet in width and up to approximately 2,500 feet at its widest part. The distance between the on-site residential uses and off-site agricultural operations would be adequate to prevent incompatibility. The buffers would be effective because the groves provide a visual and spatial buffer between the Proposed Project development and off-site agricultural operations reducing the effects of incompatible uses to less than significant.

The loss of 485 acres of agricultural lands within the cumulative study area, including 164.4 acres due to the Proposed Project would be considered a significant cumulative impact (AG-2). M-AG-2 requires the creation of 49.3 acres of agricultural open space, which would reduce this cumulative impact to less than significant.

The proposed Specific Plan Amendment and rezone would make the Project Site’s zoning consistent with proposed use, while continuing to allow agriculture in the agricultural open space areas and within residential lots where parcel sizes can accommodate agriculture. Therefore, the Proposed Project would not conflict with existing zoning and impacts would be less than significant.




In addition, no conflicts with plans and policies related to agriculture have been identified and associated impacts would be less than significant.






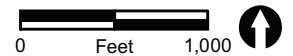
 Project Boundary

**Zoning**

-  A70, LIMITED AGRICULTURE
-  A72, GENERAL AGRICULTURE
-  S90, HOLDING AREA

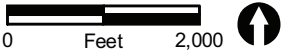
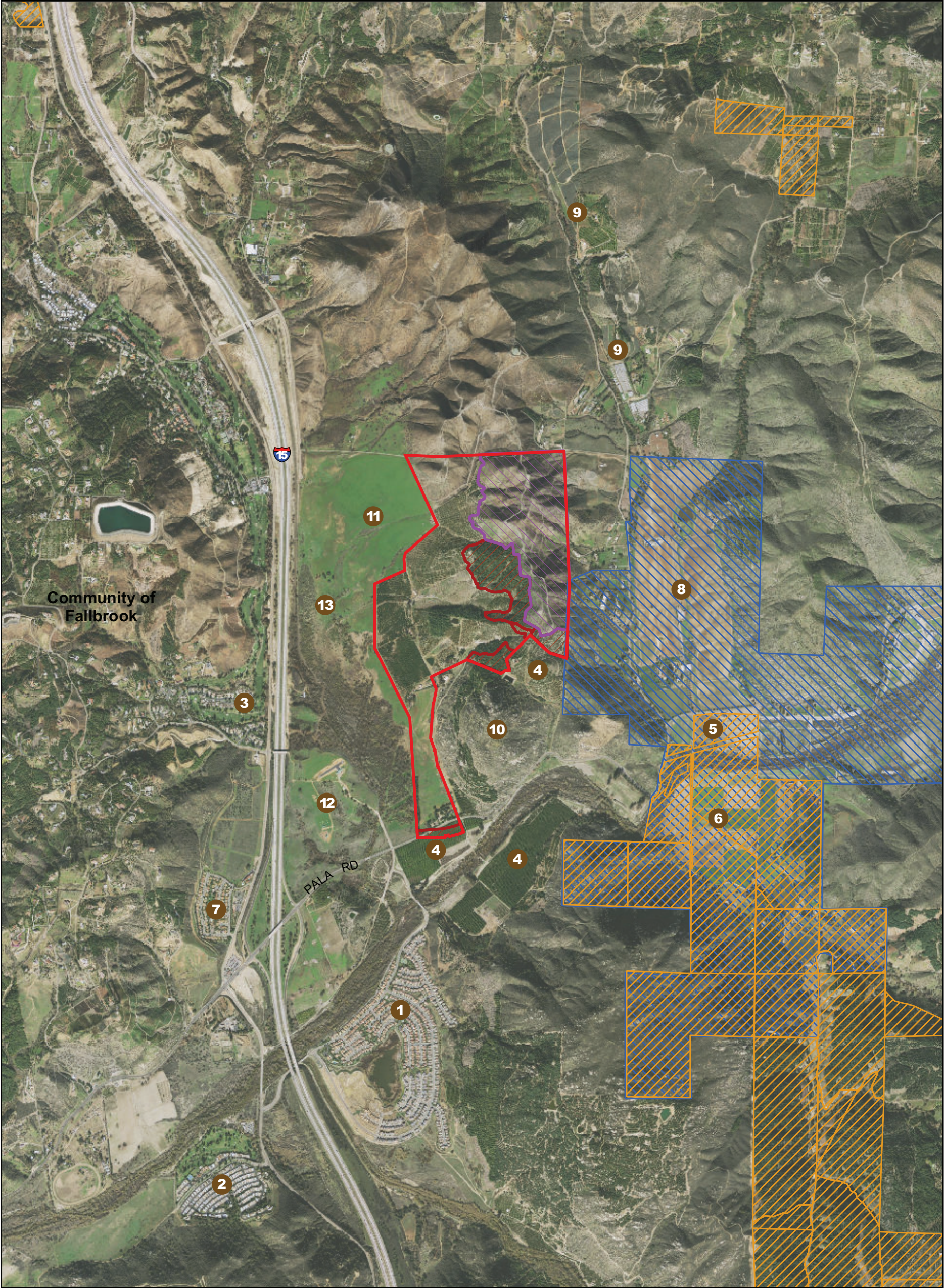
**Current Land Use**

-  Avocado Orchards
-  Citrus Orchards
-  Field Crops
-  Natural Vegetation



**FIGURE 3.2-1**  
Existing Land Use and Zoning






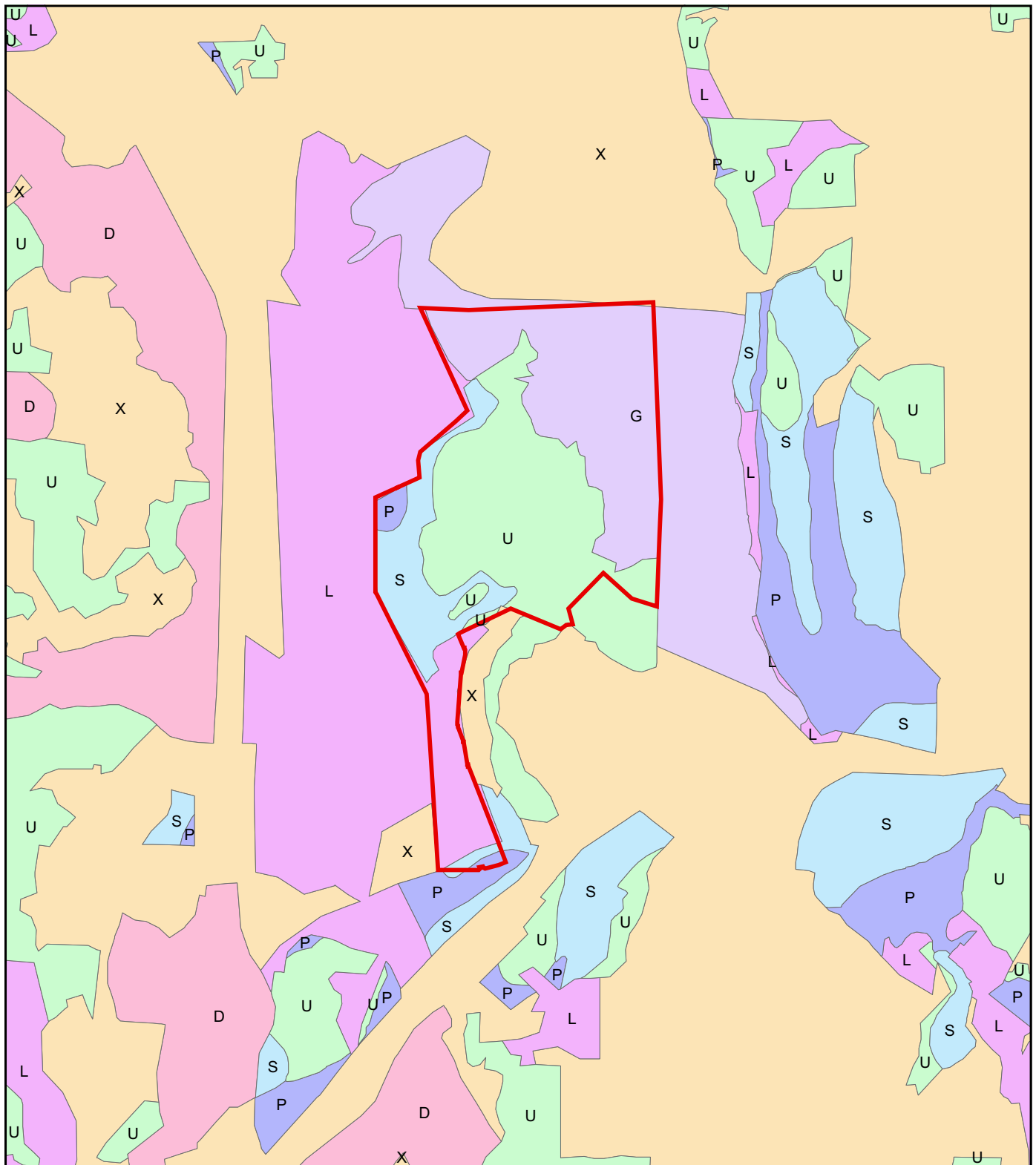
- |  |  |   |  |
|--|--|---|--|
|  Project Boundary         |  1 Rancho Viejo Mobile Home Park  |  6 San Luis Rey Ranch                          |  11 Campus Park               |
|  Williamson Act Contracts |  2 Rancho Monserat Mobile Home    |  7 Pala Mesa Village                           |  12 Campus Park West          |
|  Pala Preserve #15        |  3 Pala Mesa Resort & Golf Course |  8 Fritz Family Property                       |  13 Palomar Community College |
|  Natural Open Space       |  4 Pankey Ranch                   |  9 Rural Residential & Small Scale Agriculture |  |
|  Agricultural Open Space  |  5 Pala Rey Ranch                 |  10 Rosemary's Mountain Quarry                 |  |

FIGURE 3.2-2  
Surrounding Land Uses





Project Boundary

FMMP Data (2004)

P, Prime Farmland

U, Unique Farmland

S, Farmland of Statewide Imp

L, Farmland of Local Importa

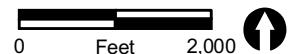
G, Grazing Land

X, Other Land

D, Urban and Built-Up Land

W, Water

Z, Not Inventoried



### **3.3     Geology and Soils**

Geocon, Incorporated conducted field investigations of the Project Site on July 1, 2, and 8 of 2002. These investigations consisted of a Project Site reconnaissance and the excavation of exploratory borings, trenches, and seismic refraction traverses. The purpose of this investigation was to evaluate the surface and subsurface soil and geologic conditions and to provide recommendations as to the feasibility of Project Site development. The geotechnical feasibility study (updated November 20, 2006) prepared for the Project Site is summarized below and can be found in its entirety in this EIR as Appendix H-1. Two additional documents, an addendum (September 19, 2007) and memorandum (September 16, 2008) that include additional information, boring logs, recommendations, and responses to County Comments, are attached to this EIR as Appendix H-2.

#### **3.3.1   Existing Conditions**

##### ***Faults***

According to a review of published geologic maps and reports (Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 1997, Fault Rupture Hazard Zones in California), the Project Site does not lie within any special hazard area identified by the Alquist-Priolo Earthquake Fault Zoning Map. One unnamed inactive fault (California Geological Survey County Report 3, 1963, as cited in Geocon 2002) was mapped approximately three miles northeast of the Project Site, but was not evaluated since it is situated off-site and its strike does not extend into the Project Site.

There are 29 known active faults located within a search radius of 62 miles (100 kilometers) from the Project Site, and the nearest known active faults are the Temecula and Julian segments of the Elsinore Fault located approximately seven and eight miles northeast of the Project Site, respectively. Major earthquakes occurring on the Elsinore Fault or other regionally active faults located in the southern California area could subject the Project Site to moderate-to-severe ground shaking within the life span of the proposed structures.

##### ***Geology/Soils***

Three surficial soil types and three geologic formations were encountered during the field investigation. Surficial soil deposits include undocumented fill, topsoil, and alluvium. Formational units include Quaternary-aged Terrace Deposits, Cretaceous-aged Bonsall Tonalite, and San Marcos Gabbro (Larsen 1948). The on-site soils consist predominantly of fine- to coarse-grained, silty sands, clayey sands, and sandy silts. These materials generally have a very low to medium expansion potential and should provide good capping material for the streets and lots.

Oversize concrete rubble and other undocumented fill are present within two westward-draining arroyos in the central portion of the Project Site. The rubble fill is estimated to be in excess of 20 feet thick in the deeper arroyos and canyons. The fills are potentially compressible and subject to collapse with an increase in moisture content.

### ***Expansive Soils***

The Project Site is located on expansive soils as defined within Table 18-I-B of the Uniform Building Code (UBC; 1994). This was confirmed by Geocon staff review of the Soil Survey for the San Diego Area, prepared by the U.S. Department of Agriculture, Soil Conservation and Forest Service dated December 1973.

### ***Liquefaction***

Liquefaction is a phenomenon where loose, saturated, and relatively cohesionless soil deposits lose strength during strong ground motions. Liquefaction analyses were conducted on the Project Site, which indicated that alluvium deposits are located below the water table. Because of the high groundwater table, the alluvium deposits, and the proximity to active and potentially active seismic areas of the County (namely the Elsinore Fault Zone), there is the potential for the Proposed Project to be susceptible to liquefaction. The areas susceptible to seismic related ground failure and/or liquefaction under current groundwater conditions include the alluvial formations that are identified on the geology map as Qal (Figure 3.3-1).

Saturated alluvium (alluvium below the water table) is generally located along the western property margin and in the southwestern portion of the Project Site. Based on Geocon's analysis, a zone of approximately 17 feet of potentially liquefiable material exists in the main drainage area at the southwestern corner of the Project Site.

### ***Rockfall***

The Project Site is on and near steep slopes with boulders/rocks that could become unstable in the event of seismic activity or heavy precipitation. The natural hillside has slope inclinations ranging between 1.3:1 to 3:1. A potential exists for rockfall off-site from the west-facing slope of Rosemary's Mountain located immediately south of Monserate Mountain. Large boulders on the order of 20 feet or greater in diameter are present on the natural slopes above the road. Figures 3.3-2 and 3.3-3 show the approximate locations of specific boulders that have been identified with potential for rockfall.

### ***Erodibility***

The entire Project Site is comprised of soils that are categorized by the Soil Survey of San Diego County as "Severely or Moderately Erodible." Some of the geologic effects created by poorly protected severely erodible soils can range from altering natural drainage features to creating environments suitable for landsliding and rockfall.

## **3.3.2 Guidelines for the Determination of Significance**

For the purpose of this EIR, the basis for the determination of significance is the CEQA Appendix G Guidelines (Guidelines 1 through 4) and Table 18-1 of the UBC (1994).

A significant geologic/soils impact would occur as a result of proposed project implementation if it:

1. Exposes people or structures to geologic hazards such as rupture of a known earthquake fault, strong seismic shaking, landslides, mudslides, and ground failure including liquefaction;
2. Is located on a geologic unit or soils that is unstable, or that would become unstable as a result of the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
3. Results in substantial soil erosion or the loss of top soil; and
4. Is located on expansive soils, as defined in Table 18-1 of the UBC (1994) and does not conform with the UBC.

### **3.3.3 Analysis of Project Effects and Determination as to Significance**

#### ***Faults and Liquefaction (Guideline 1)***

A significant impact would occur if the project exposes people or structures to geologic hazards such as rupture of a known earthquake fault, strong seismic shaking, and ground failure including liquefaction.

Although the Project Site is not located within a hazard zone of the Alquist-Priolo Earthquake Fault Zone Map, it is situated relatively close to active and potentially active seismic areas of the County. Since there are no known active faults on the Project Site, the potential impact of rupture of a known earthquake fault is **less than significant**. Major earthquakes occurring on the Elsinore Fault that could subject the Project Site to moderate-to-severe ground shaking within the life span of the structures associated with the Proposed Project. The Project Site is considered to be comparable to the surrounding developed area with respect to seismic shaking. The Proposed Project design would address strong seismic shaking by ensuring that the Proposed Project design is in conformance with the UBC/CBC and the County Zoning Ordinance (see Table 1-5), as well as all recommendations found in section 7 of the geotechnical study, thereby reducing the potential impact of strong seismic shaking to a level that is **less than significant**.

Much of the Project Site would require only a 13-foot-thick non-liquefiable layer to resist liquefaction, which currently already exists over most of the Proposed Project area. The main area of concern is the main drainage in the southwestern area of the site (near the proposed school site, and north of SR-76) which does not have enough non-liquefiable material to resist liquefaction. There are also smaller areas along the western edge of the property with similar liquefaction potential. The geotechnical report estimates that (in some areas) an 18- to 22-foot-thick non-liquefiable layer would be required in order to resist the upward pressure of the liquefying stratum for the level of ground-shaking that was assumed possible for the Project Site. Since standard design measures would not completely eliminate the risks associated with liquefaction in the southwestern and western areas of the Project Site, impacts would be **significant (GE-1)**.

### ***Rockfall (Guideline 2)***

A significant impact would occur if the project is located on a geologic unit or soils that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

The potential exists on the Project Site for rockfall from the west-facing slope of Rosemary's Mountain due to seismic or erosional events. The identified area of having rockfall potential is not located on the Project Site and will not be impacted by grading and construction of the Proposed Project. Lots located down gradient from the potential area of rockfall include the proposed school site and residential lots 356, 383 through 396, 403, 404, and 406 through 409. These lots are located on the west side of Horse Ranch Creek Road, as shown on Figures 3.3-2 and 3.3-3. Future seismic activity or heavy precipitation/erosional events could potentially dislodge boulders.

The Proposed Project design will incorporate features, such as open space buffers and tree plantings, to reduce impacts from rockfall and soil instability. However, pursuant to Guideline 2, standard design measures would not completely eliminate risks associated with rockfall, and as such, impacts would be **significant (GE-2)**.

### ***Erodibility (Guideline 3)***

A significant impact would occur if the project would result in substantial soil erosion or the loss of top soil.

Due to the erodible soils that exist on the Project Site, there is the potential for significant erosion impacts to occur. However, the Proposed Project design includes erosion control measures and a landscaping plan that comply with current San Diego County and Fallbrook community rules and regulations to prevent soil erosion on- and off-site (see Table 1-5). Therefore, the Proposed Project impacts would be **less than significant**.

### ***Expansive Soils (Guideline 4)***

A significant impact would occur if the project is located on expansive soils, as defined in Table 18-1 of the UBC (1994) and does not conform with the UBC.

The Project Site is located on expansive soils as defined within Table 18-I-B of the UBC. The Proposed Project will comply with the improvement requirements identified in the 1997 UBC. The geotechnical study performed by Geocon Incorporated found that complete removal and recompaction of the compressible deposits, which are found in several locations across the Project Site, will be required in order to support structural improvements. Because of the presence of groundwater in the main drainages, complete removal of the alluvium will likely not be possible. Compressible deposits and expansive soils would be addressed by remedial grading and other Proposed Project design considerations listed in Table 1-5. These specific design measures are required to reduce the potential for hazards associated with both cut and fill slopes and seepage and perched water. Implementation of these design features assure that impacts relating to expansive soils would be **less than significant**.

### 3.3.4 Cumulative Impact Analysis

As discussed above the Proposed Project could result in potentially significant geological hazards due to soil liquefaction and rockfall. This significant impact is reduced to a level of less than significance through the implementation of mitigation measures, discussed below. Additionally, Project Site conditions relating to erosion and expansive soils are less than significant due to erosion control measures, landscaping plans, and conformance with current San Diego County and Fallbrook community rules and regulations, as well as the CBC/UBC. Based on the strict requirements identified in the listed National Pollutant Discharge Elimination System (NPDES) permits and the fact that other planned and proposed developments in the Proposed Project vicinity would be required to implement similar controls, no significant cumulative erosion and sedimentation impacts are anticipated. As with the Proposed Project, cumulative area projects with similar potential would be required to implement similar site-specific measures to address potential impacts to geology and soil. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Based on these requirements, cumulative impacts to geology would result from development of the Proposed Project would be **less than significant**.

### 3.3.5 Mitigation Measures Proposed to Minimize the Significant Effects

**M-GE-1** The applicant shall raise the existing grade while also removing and re-compacting the alluvium above the groundwater table to increase the overburden pressure over the liquefiable deposits as recommended by the geotechnical engineer.

**M-GE-2** Mitigation of rockfall potential shall consist of: (1) identifying boulders that have a high potential for rockfall and breaking and/or removing these rocks from the hillside; (2) identifying boulders that have a less significant rockfall potential, testing these rocks with excavation equipment, and removing rocks that move or appear to be unstable; and (3) monitoring rocks during development of the Proposed Project identified that have a less than significant rockfall potential.

- 1) Boulders identified as having a high potential (eroded at the base or entirely free from the soil) shall be broken and removed from the slope, or alternatively rock bolted to the slope. This will require use of an excavator with a rock breaking device or drilling the rock and using chemicals that break rock, or the use of anchors to pin the rock to the slope. Large rocks that are impractical to completely remove or anchor to the slope shall be broken down such that they are relatively flat or on contour with the slope face to create a rock with a shape that will not roll.
- 2) Boulders identified as having a less significant rockfall potential shall be tested by applying pressure with the excavator. If the boulders move they shall be mitigated as recommended under No. 1. Boulders that are small enough such that they can easily be moved shall be pushed or rolled down the slope.

- 3) During the monitoring period after a period of heavy rain, the boulders shall be observed to assess if runoff has caused undermining of the downhill side of the boulder. Removal and/or breaking of the boulders as recommended shall be performed if undermining occurs.

### **3.3.6 Conclusion**



Implementation of the Proposed Project could result in risks associated with liquefaction, especially along the main drainage in the southwestern area of the Project Site, as well as other smaller areas along the properties western edge (GE-1). M-GE-1 requires the inclusion of site-specific geotechnical design criteria beyond standard design measures including the requirement to raise the grade of the Proposed Project and the re-compacting of soils over liquefiable deposits. Implementation of these additional measures, as detailed in Section 7 of the geotechnical report, would reduce potentially significant impacts to below a level of significance.

Implementation of the Proposed Project could result in risks associated with rockfall due to seismic activity or heavy precipitation/erosional events (GE-2). M-GE-2 provides specific mitigation that would reduce the hazard of rockfall by assuring that boulders identified as potentially dangerous are removed or broken down, testing of smaller boulders and monitoring after heavy rainfall. Implementation of these mitigation measures would reduce potentially significant impacts to below a level of significance.

No other soil or geologic conditions were encountered that would prevent the development of the Proposed Project for residential uses provided the Project Site is graded in accordance with the UBC/CBC, the County Grading Ordinance, and the geotechnical report's recommendations (Section 7). These recommendations are listed as project design considerations in Table 1-5 and would preclude impacts associated with geologic hazards resulting from implementation of the Proposed Project.





 Project Boundary  
 Geological Areas (approximate)

<i>Qudf</i>	..... UNDOCUMENTED FILL
<i>Qudfr</i>	..... UNDOCUMENTED FILL RUBBLE (Mostly oversize concrete chunks)
<i>Qal</i>	..... ALLUVIUM
<i>Qt</i>	..... TERRACE DEPOSIT
<i>Qtd</i>	..... LOCALIZED "HARDPAN" OR OVERSIZE
<i>Kb</i>	..... BONSAL TONALITE
<i>Kbg</i>	..... BONSAL TONALITE GNEISS
<i>Ksm</i>	..... SAN MARCOS GABERCO

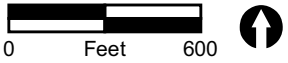


FIGURE 3.3-1  
Geology



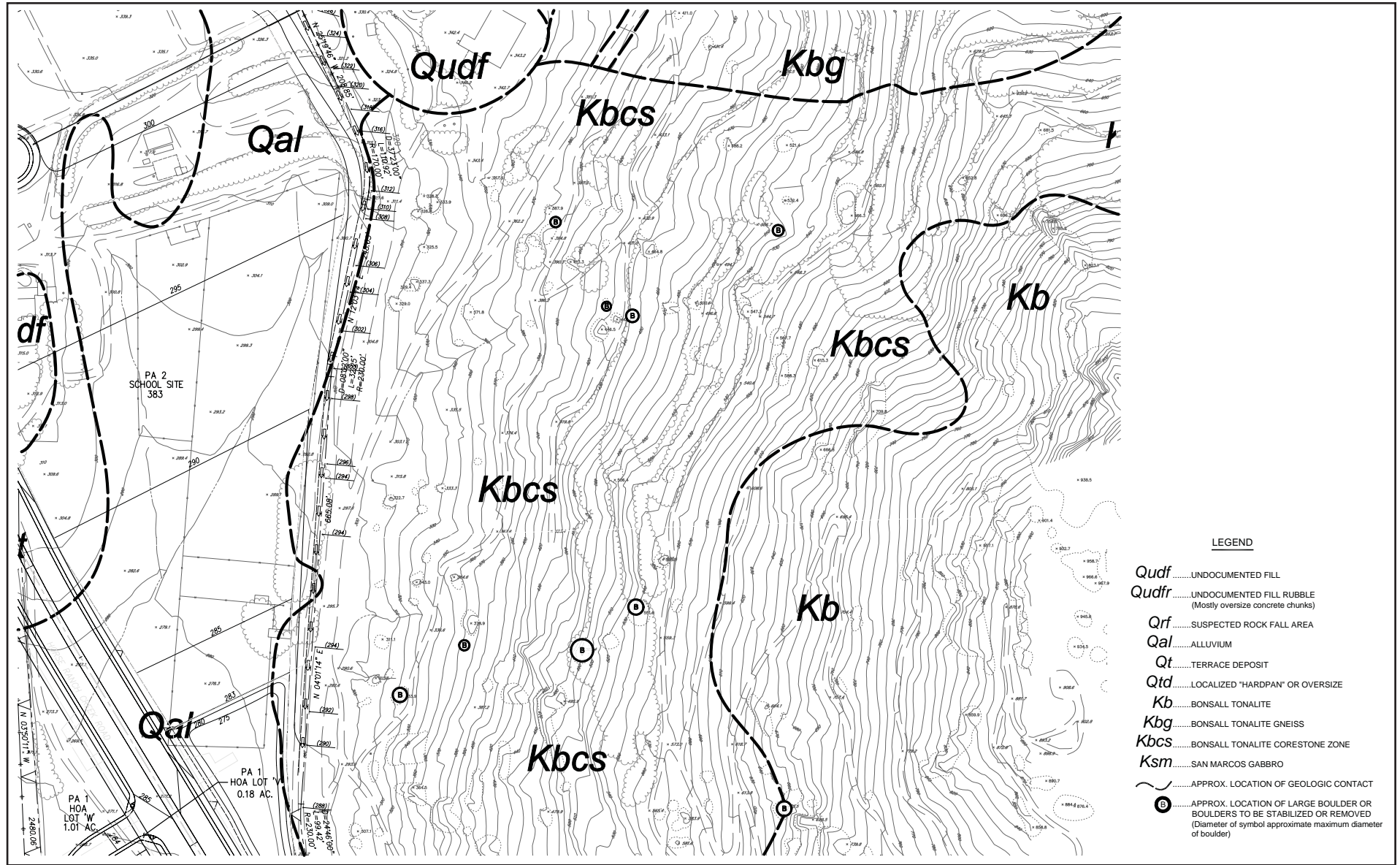


FIGURE 3.3-2

Boulders with Rockfall Potential (North)



### **3.4 Cultural Resources**

The assessment of the Proposed Project's potential to have an adverse effect on cultural resources on- and off-site is based on the Cultural Resources Survey, Archaeological Testing, and Historic Building Evaluation for the Proposed Meadowood Project, San Diego County, California Volume I (ASM Affiliates, Inc. 2009). This report is included as Appendix I to this EIR with confidential records and maps on file at the County of San Diego, Department of Planning and Land Use and deposited with the South Coastal Information Center (SCIC).

#### **3.4.1 Existing Conditions**

The presence and significance of existing cultural resources associated with the Proposed Project were determined in accordance with the regulations and research methods outlined below.

##### ***Existing Regulations***

The California Register of Historic Resources (CRHR) establishes the evaluative criteria used by CEQA in defining an historic resource. An historic resource is significant if it meets one or more of the criteria for listing in the CRHR. Resources are eligible for listing on the CRHR if they:

1. Are associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.
2. Are associated with the lives of persons important to the nation or to California's past.
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Have yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

The County also has a series of criteria to determine the significance of historical resources for inclusion on the San Diego County Local Register of Historic Resources. These guidelines closely follow those for CEQA, but are focused on resources of County significance. Historic resources are eligible for this register if they:

1. Are associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
2. Are associated with the lives of persons important to the history of San Diego County or its communities;

3. Embody the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The County RPO has a set of criteria that must be addressed for any cultural resources encountered during a survey. These ask the following questions in regard to the resource.

Is the cultural resource:

1. A location of past intense human occupation where buried deposits can provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance?
2. A prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places or the State Landmark register?
3. Included or eligible for inclusion, but not previously rejected, for the San Diego County Historical Site Board List?
4. A location of past or current sacred religious or ceremonial observances protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figure, and natural rocks or places which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group?

### ***Methods***

Research included a review of institutional records and reports concerning the project area and immediate vicinity, a field survey, surface mapping, limited artifact collection, photographic documentation, historic structures assessment, and excavation of backhoe trenches and shovel test pits (STPs) to determine the extent, integrity, and constituents of site deposits. Site record forms, including updates, were prepared for CA-SDI-682 Loci A, B and C and for the Rancho San Luis Rey/Pankey Ranch building complex, and submitted to the SCIC of the California Historic Resources Information System, Department of Parks and Recreation.

The evaluation of cultural resources is in conformance with the County RPO, Section 21083.2 of the Public Resources Code, and CEQA. Statutory requirements of CEQA Guidelines Section 15064.5 were followed in the evaluation of the significance of the cultural resources.

***Records Search Result*****On-site**

According to the records on file at the SCIC, there have been 16 cultural resource surveys conducted within a one-mile radius of the Project Site. Three of the studies overlapped portions of the Project Site (RECON 1982; Rosenthal et al. 1987; WESTEC 1980). Two studies included archaeological survey of the western edge of the Proposed Project (RECON 1982; WESTEC 1980). Rosenthal et al. (1987) conducted an archaeological survey of Rosemary's Mountain Rock Quarry for proposed rock mining operations, which intersected a portion of the Project Site at the northern base of Rosemary's Mountain Rock Quarry. None of the surveys identified cultural resources within the Project Site.

The SCIC record search showed a total of 13 previously recorded archaeological sites within a one-mile radius of the Proposed Project; 12 prehistoric sites and one historic site. Eight of the prehistoric sites consist of bedrock milling features and associated artifact scatters, one of bedrock milling features and pictographs, one consists of only bedrock milling, and one consists exclusively of pictographs. One prehistoric site, CA-SDI-682, is a large habitation site associated with the ethnographic Luesiño village of Tom-Kav. A portion of CA-SDI-682 is mapped extending into the southernmost portion of the Project Site. The single recorded historic site is the Higgins Family cemetery.

The Project Site also appears to include the original location of Historic Period Rancho Monserrate Adobe. The Rancho Monserrate ranch house probably existed in the southeastern corner of the Project Site. No physical evidence of the adobe has been found, and any remains were probably destroyed by the construction of the Pankey Ranch complex.

**Off-site**

According to the record search conducted at SCIC, a total of 27 previously recorded sites are situated within a one-mile radius from the Proposed Project's off-site improvements. Of the sites recorded, 22 are prehistoric and five are historic. The majority of the prehistoric sites are bedrock mining sites that could represent short-term, or temporary campsites. There are also a relatively high number of rock art sites located within a one-mile radius of the Project Site.

***Survey Results*****On-site**

Two cultural resources were encountered during the survey of the Project Site: one historic and one prehistoric site. The prehistoric site, CA-SDI-682 (Loci A, B, and C), also known as the Pankey Site, is a well-known site excavated and reported by True et al. (1993).

The survey also identified a new site, the Rancho San Luis Rey/Pankey Ranch building complex. A description of the sites is included in Table 3.4-1.

**TABLE 3.4-1  
RECORDED ARCHAEOLOGICAL SITES WITHIN A 1-MILE RADIUS OF THE PROJECT AREA**

Resource # CA-SDI-	Description	National Register of Historic Places Status
314	Pictographs	Indeterminate
682 (Pankey Site)	Large Habitation Site	Ethnographic Village Eligible
683	Bedrock Milling and Artifact Scatter	Indeterminate
684	Bedrock Milling and Artifact Scatter	Indeterminate
744/12584	Bedrock Milling and Artifact Scatter	Not Evaluated
773	Bedrock Milling	Indeterminate
8871	Bedrock Milling and Artifact Scatter	No Determination
9854	Bedrock Milling and Artifact Scatter	Indeterminate
10861	Bedrock Milling and Artifact Scatter	Indeterminate
12585	Bedrock Milling and Artifact Scatter	Not Evaluated
14585	Bedrock Milling and Artifact Scatter	Indeterminate
14607	Historic Cemetery	Indeterminate
14609	Bedrock Milling and Pictographs	Not Evaluated

#### Off-site

No new or previously recorded cultural resources were identified during the survey of the Proposed Project off-site improvement areas.

#### **3.4.2 Guidelines for the Determination of Significance**

For the purpose of this EIR, the basis for the determination of significance is the County's Guidelines for Determination of Significance, Cultural Resources, adopted September 26, 2006.

A significant cultural resource impact would occur if:

1. The project causes a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.
2. The project causes a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. The project disturbs any human remains, including those interred outside of formal cemeteries.
4. The project proposes activities or uses damaging to significant cultural resources as defined by the Resource Protection Ordinance and fails to preserve those resources.



### 3.4.3 Analysis of Project Effects and Determination as to Significance

According to CEQA Guidelines Section 15126.4(b)(3), “public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature and requires the consideration of preservation in place as the preferred manner of mitigation and data recovery, only if preservation is not feasible.”

An analysis of each site is provided below along with a determination as to the significance of the site, pursuant to the CEQA Guidelines Section 15064.5 and the County RPO.

#### ***Historic Resources (Guideline 1)***

A significant impact would occur if the project would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.

#### **On-site**

As a result of the cultural resources survey, one historic resource was documented and evaluated for significance. This historic resource is a group of historic buildings associated with Rancho San Luis Rey/Pankey Ranch.

A second, potential historic resource was documented during the archival research for the Proposed Project. The Project Site appears to include the location of Historic Period Rancho Monserrate Adobe. No physical indication of the adobe was found during the ASM survey, but map and literature research shows that the adobe was probably located in the southeastern portion of the Project Site. Since there is no surface indication of the Monserrate Adobe, no significance evaluation was completed.

These sites are summarized below along with a determination as to the significance of the sites. A detailed discussion of each site can be found in the cultural resources study (see Appendix I).

#### **Non-significant Historic Resources**

A total of 13 historic period structures associated with the Rancho San Luis Rey/Pankey Ranch were identified as present or previously recorded on the Project Site, as identified by the field survey and archival research. A total of six of the 13 historic structures on the Project Site were evaluated for significance according to CEQA Section 15064.5 and the RPO criteria. These six buildings were more than 50 years old.

Five of the six buildings were constructed in the late 1920s or early 1930s. They were associated with Rancho San Luis Rey, a thoroughbred breeding and training facility owned and operated by Charles E. Cooper. The historic buildings evaluated include a bungalow, a bunkhouse, two small garages, a rustic barn, and a concrete refrigeration room. None of the historic buildings located with the Project Site appear to be eligible for the California Register or the Local Register.

The information recovered during the site evaluation indicates that the historical resources found on the Project Site: (1) are not associated with events that have made a significant contribution to the broad patterns of California's history, (2) are not associated with the lives of persons important in our past, (3) does not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values, and (4) lacks the potential to further answer questions related to understanding the history of the area. Because these cultural resources are evaluated as not important resources according to CEQA and RPO, any impacts incurred through the Proposed Project implementation would be **less than significant**.

#### Significant Historic Resource

Based on study of historic maps, the Rancho Monserrate Adobe may be located in the site of the current Pankey Ranch buildings on the Project Site. The adobe was occupied between 1846 and 1863. A second house, Morel's house, was also located on the Project Site between 1869 and 1896. Although there are no standing remains of either building, there is the possibility that subsurface foundations, trash pits, privies, or other features may be present. If such features are present subsurface, they could provide significant insight into life during the late Mexican and early American periods in San Diego County.

Because there was no evidence of the Monserrate Adobe, no evaluation could be done and the questions normally addressed to determine the significance of the resource cannot be addressed at this time. Theoretically, the Monserrate Adobe would be significant under criteria 1 and 4 of the CEQA criteria: (1) The adobe is associated with events that have made a significant contribution to the broad patterns of California's history, in this case the late Mexican Period and transition into the American Period and (4) Subsurface deposits may provide information to further answer questions related to understanding the history of the area and life in rural San Diego County in the late Mexican Period and transition into the American Period. Thus, implementation of the Proposed Project could impact subsurface deposits associated with the adobe, resulting in a **significant impact (CR-1)**.

#### Off-site

No new or previously recorded historical resources were identified within the off-site improvement areas for the Proposed Project. No impacts to historical resources would occur through Proposed Project implementation of off-site improvements.

#### ***Archaeological and RPO Resources (Guidelines 2 and 4)***

A significant impact would occur if the project would cause a substantial adverse change in the significance of an archaeological resource, pursuant to the CEQA Guidelines Section 15064.5. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory. In addition, a significant impact would occur if the project proposes activities or uses damaging to significant cultural resources as defined by the RPO and fails to preserve those resources.

### On-site

As a result of the cultural resources survey, archival research, and subsurface testing of the Project Site, the boundaries of the previously recorded prehistoric large habitation site/ethnographic village (CA-SDI-682), also known as the Pankey site, were extended west of the ranch road to encompass new archaeological deposits discovered by ASM. The Pankey site was identified as a significant site during the records search, literature review, field survey, and testing. The site is summarized below along with a determination as to the significance of the site. A detailed discussion can be found in the Cultural Resources Report (see Appendix I).

Three loci (Loci A, B, and C) associated with the CA-SDI-682 were identified during the cultural survey of CA-SDI-682. Loci A and B of this site contain pockets of midden deposits less than 300 square meters in size. These sites are considered significant resources, as defined by the RPO, because they may represent a location of past intense human occupation where buried deposits can provide information on important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance. Pursuant to the RPO, impacts to significant cultural resources must be avoided. Therefore, implementation of the Proposed Project, could result in a **significant impact** to these resources **(CR-2)**.

Locus C of CA-SDI-682 consists of sparse, deeply buried deposits, probably covered by extensive colluvial deposition. Due to the deeply buried nature of the deposit, it is possible that undetected, intact archaeological deposits exist below the ground surface. Implementation of the Proposed Project could result in a **significant impact** to these resources **(CR-3)**.

### Off-site

No new or previously recorded archaeological resources or RPO significant cultural sites were identified within the off-site improvement areas for the Proposed Project. However, the Proposed Project was identified to have the potential to impact buried deposits within the off-site areas due to the large number of cultural resources in the vicinity, thus impacts to unidentified resources would be **significant (CR-4)**.

### ***Human Remains (Guideline 3)***

A significant impact would occur if the project would disturb any human remains, including those interred outside of formal cemeteries.

### On-site

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review, field survey, or site testing and evaluation. Although there is no known evidence that the Project Site was used by Native Americans for religious, ritual, or other special activities, and therefore, used as a Native American burial site, human remains could be uncovered during grading, resulting in a **significant impact (CR-5)**.

### Off-site

No evidence of human remains was discovered during the evaluation of the off-site improvements areas for the Proposed Project. However, should human remains be found, this would be a **significant impact (CR-5)**.

#### **3.4.4 Cumulative Impact Analysis**

The importance of cultural resources is based on the information they contain. A cumulative loss of that information would be considered a significant impact. Excavation, while destroying the preserved nature of land containing the resource, allows the study of the information they contain. This information is then preserved through data recovery, significance testing, and curation.

The cumulative study area includes the study area that allows for the reasonable capture of prehistoric and historic settlement patterns. By analyzing sites within the study area, it can be determined whether implementation of the project would result in a cumulative loss of information.

The Proposed Project site contains archaeological site CA-SDI-682, which is both a CEQA and RPO significant cultural resource because of its potential to provide important information about scientific research questions. Impacts to this site would be mitigated to below a level of significance through placement of the site within a conservation easement. All other potentially significant direct and indirect impacts would be mitigated through the monitoring of grading activities by a project archaeologist.

The cumulative projects in the vicinity of the Proposed Project are discussed in Section 1.7 "List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area," as listed in Table 1-7 and shown in Figure 1-19. The SCIC records search revealed a total of 12 prehistoric archaeological sites and one historic site within the Proposed Project's cumulative study area for archaeological impacts. The lone historical site is the Higgins family cemetery, recorded on a ridge above the San Luis Rey River floodplain approximately one mile east of the Project Site. The majority of the archaeological resources in the Proposed Project vicinity consisted of bedrock milling sites recorded at the base of mountains along the San Luis Rey River. Cultural remains at these sites typically consisted of bedrock mortars and slicks, Tizon Brown ware ceramics, ground stone implements, flaked stone tools and debitage, fire-affected rock, vertebrate and invertebrate faunal remains, and midden soils. Three typical bedrock milling sites (CA-SDI-10,861, CA-SDI-8871, and CA-SDI-773) are recorded at the toe of Monserrate Mountain within approximately 600 meters of the Proposed Project. Pictographs were also recorded at two of the sites (CA-SDI-314 and CA-SDI-14,609). The pictographs of CA-SDI-314 are recorded at the base of Rosemary's Mountain Rock Quarry, approximately 300 meters east of the Proposed Project. The remaining cultural resources in the vicinity of the Proposed Project (see Table 3.4-1) were determined not to be significant cultural resources.

Because the Proposed Project and those projects within the cumulative impact area have been examined for their significance, there is no cumulative loss of information associated with their development. Additionally, should new resources be discovered during development within the cumulative impact area, site-specific measures necessary to evaluate and collect relevant information would likely occur. The Proposed Project

would not cumulatively contribute to a significant impact. Therefore, impacts would be **less than significant**.

### **3.4.5 Mitigation Measures Proposed to Minimize the Significant Effects**

#### ***Historical Resources***

- M-CR-1** A professional archaeologist shall monitor grading in the vicinity of the mapped location of the Monserrate Adobe (refer to Figure 35 in Appendix I), as well as the area north of SR-76. A Monitoring Discovery Plan shall be prepared prior to commencement of construction activity, to be put in use in the event historic deposits are discovered. All artifacts recovered during all phases of survey, testing, and grading monitoring shall be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility with San Diego County, to be accompanied by payment of the fees necessary for permanent curation.

#### ***Archaeological Resources***

- M-CR-2a** To preserve the integrity of CA-SDI-682, the applicant shall cap Loci A and B per County of San Diego standards, landscaped as part of the overall development and placed in a conservation open space easement. A Preservation Plan describing the methods and ultimate disposition of the capped site area has been prepared and is included as Appendix H of the Cultural Resources Report. The location of the conservation open space easement is shown in Figure 4 of this Plan.
- M-CR-2b** For the protection of archaeological site CA-SDI-682, Loci A and Loci B, the applicant shall prepare and implement a temporary fencing plan during any grading activities with one hundred feet. The fencing plan shall be prepared in consultation with a qualified archaeologist to the satisfaction of the Director of the Department of Planning and Land Use. The fenced area should include a buffer sufficient to protect the archaeological site. The fence shall be installed under the supervision of the qualified archaeologist prior to commencement of grading or brushing and be removed only after grading operations have been completed.
- M-CR-3** A professional archaeologist shall monitor grading in the vicinity of Loci C, as well as the area north of existing SR-76. A Monitoring Discovery Plan shall be prepared prior to commencement of construction activity, to be put in use in the event archaeological deposits are discovered. All artifacts recovered during all phases of survey, testing, and grading monitoring shall be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility with San Diego County, to be accompanied by payment of the fees necessary for permanent curation.
- M-CR-4** A professional archaeologist shall monitor grading and subsurface excavation in off-site areas. All artifacts recovered during all phases of

survey, testing and grading monitoring shall be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility with San Diego County, to be accompanied by payment of the fees necessary for permanent curation.

**M-CR-5** A professional archaeologist shall monitor grading and subsurface excavation in on- and off-site areas not covered by CR-1 and CR-3. All artifacts recovered during all phases of survey, testing, and grading monitoring shall be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility with San Diego County, to be accompanied by payment of the fees necessary for permanent curation.

### **3.4.6 Conclusion**

Implementation of the Proposed Project could result in significant impacts to subsurface deposits associated with the undiscovered whereabouts of the Rancho Monserrate Adobe (CR-1). M-CR-1 requires an archaeological monitor to be present for all grading activities in the vicinity of the adobe. This measure assures that grading will be halted or diverted should any discovery be made. The measure further assures that any findings are recovered, documented, and preserved. With the implementation of this measure, potentially significant impacts will be reduced to a level that is less than significant.

Archaeological site (CA-SDI-682) was identified as a CEQA and RPO significant resource (CR-2). M-CR-2 requires the placement of this resource in a conservation open space easement and cap it with a minimum of 50 cm of clean fill. This measure will assure that the site will remain preserved. With the implementation of this measure, potentially significant impacts would be reduced to a level that is less than significant.

Implementation of the Proposed Project could result in significant impacts to undetected archaeological deposits located underground within Loci C of the known site (CA-SDI-682) (CR-3), construction of off-site improvement areas (CR-4), and could result in the uncovering of human remains during on- and off-site grading activities (CR-5). M-CR-3, M-CR-4 and M-CR-5 require an archaeological monitor to be present for all grading activities. This measure assures that grading will be halted or diverted should any discovery be made. The measure further assures that any findings are recovered, documented, and preserved. With the implementation of this measure, potentially significant impacts will be reduced to a level that is less than significant.

### **3.5    Noise**

This section summarizes the acoustical study for the Proposed Project prepared by RECON (2009). The complete technical report is included in this EIR as Appendix J.

#### **3.5.1   Existing Conditions**

Ambient noise in the vicinity of the Project Site is generated by traffic on SR-76 and the I-15. In addition, the Proposed Project is situated between several planned developments which will eventually contribute to the ambient noise levels: Palomar College North Education Center, Campus Park, and Campus Park West. The approved Rosemary's Mountain Rock Quarry to the south and east is also a potential noise source.

#### ***Existing Regulations***

##### **Traffic-generated Noise**

Noise standards applicable to traffic-generated noise are expressed in terms of the community noise equivalent level (CNEL). The CNEL is a 24-hour A-weighted average sound level [dB(A)  $L_{eq}$ ] from midnight to midnight obtained after the addition of five decibels to sound levels occurring between 7:00 P.M. and 10:00 P.M. and of 10 decibels to the sound levels occurring between 10:00 P.M. and 7:00 A.M. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. Adding five decibels and 10 decibels to the evening and nighttime hours, respectively, accounts for the added sensitivity of humans to noise during these time periods.

The noise level standards for the County of San Diego are defined in the County of San Diego's adopted General Plan Noise Element. The County's exterior noise level standard for noise sensitive land uses (NSLU), which include residences, is 60 CNEL. If the acoustical study shows that noise levels at any NSLU will exceed CNEL equal to 60 dB(A), the development should not be approved unless the following findings are made:

- A. Modifications to the development have or will be made that reduce the exterior noise levels below CNEL equal to 60 dB(A); or
- B. If with current noise abatement technology it is infeasible to reduce exterior CNEL to 60 dB(A), then modifications to the development have or will be made that reduce interior noise below CNEL equal to 45 dB(A). Particular attention shall be given to noise-sensitive interior spaces such as bedrooms.
- C. If finding "B" above is made, a further finding is made that there are specifically identified overriding social or economic considerations that warrant approval of the development without modification as described in "A" above.

In addition, if noise levels at any NSLU will exceed CNEL equal to 75 dB(A), the development should not be approved.

Because interior noise levels for multi-family residences are also regulated by Title 24 of the State Building Code, the County evaluates interior levels for multi-family units as part of the building permit process.



Title 24 of the State Building Code requires that:

Residential structures to be located within an annual CNEL contour of 60 require an acoustical analysis showing that the structure has been designed to limit intruding noise to the prescribed allowable levels.

and that:

Interior CNEL with the windows closed, attributable to exterior sources shall not exceed an annual CNEL of 45 dB(A) in any habitable room.

### Construction Noise

The County has a well-defined Noise Ordinance that covers construction noise. Section 36.409 states:

Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 dB(A)  $L_{eq}$  for an eight-hour period, between 7:00 A.M. and 7:00 P.M., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

Emergency work is defined as follows in the County's Noise Ordinance:

Emergency Work shall mean work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from imminent exposure to danger or damage or work by public or private utilities when restoring utility service (Section 36.402).

### ***Existing Noise Measurements***

Ambient noise conditions were measured in and around the Project Site. In order to provide a qualitative assessment of the variability of noise throughout the study area, a series of three short-term daytime noise measurements, 20 minutes in duration, were made by RECON on July 14, 2005, throughout the study area. An additional two measurements were made by RECON on November 13, 2006. Long-term (24-hour) measurements were taken by Pacific Noise Control for the Campus Park Project located directly west of the Proposed Project. The measurement locations are shown on Figure 3.5-1 and were chosen to obtain existing noise levels in order to characterize the existing ambient noise condition.

The first set of short-term measurements was taken by RECON between 10:40 A.M. and 12:10 P.M. on Thursday, July 14, 2005. The weather was warm and mostly cloudy with three to five mph winds from the southwest. Measurement 1 was taken on the western boundary of the Proposed Project with a relatively unobstructed view of I-15. During measurement 1, a few vehicles passed by the dirt road adjacent to the measurement; however, the primary noise source was traffic on I-15. Measurement 2 was taken near the center of the Proposed Project. Measurement 2 had only a partial line of sight to I-15. Measurement 3 was located adjacent to SR-76.

The second set of measurements was taken by RECON on November 13, 2006, between the hours of 3:00 P.M. and 4:30 P.M. The weather was clear with gentle, immeasurable winds. Measurement A was taken towards the north end of the Proposed Project and Measurement B was taken northeast of Measurement 2. There was a clear view of I-15 from both measurement locations.

Table 3.5-1 presents the results of the short-term noise measurements. As seen from Table 3.5-1, the measured short-term noise levels ranged from approximately 46 to 69 dB(A)  $L_{eq}$  with the loudest levels occurring adjacent to SR-76.

Long-term (24-hour) measurements were taken by Pacific Noise Control for the Campus Park project located directly west of the Proposed Project. The measurement was taken from August 23, 2005, at 2:00 P.M. to August 25, 2005, at 12:00 P.M. The long-term measurement location (Measurement PNC) is shown in Figure 3.5-1. This measurement was taken approximately 180 feet east of the center line of I-15. The measured hourly noise levels are summarized in Table 3.5-2. The average daytime noise level was 78.4 dB(A)  $L_{eq}$ , the average evening noise level was 76.9 dB(A)  $L_{eq}$ , and the average nighttime noise level was 74.3 dB(A)  $L_{eq}$ . The noise level during the 24-hour period was 82 CNEL. This long-term measurement results in a daytime/evening/nighttime traffic distribution of 68 percent of the traffic during the daytime hours, 12 percent during the evening hours, and 20 percent during the nighttime hours for I-15.

### 3.5.2 Guidelines for the Determination of Significance

For the purposes of this EIR, the basis for the determination of significance is the Guidelines for Determination of Significance, Noise, adopted January 27, 2009. A project will have a significant adverse environmental effect related to noise if a project-related component results in any of the following:

1. Project implementation would result in the exposure of any on- or off-site, existing or reasonably foreseeable future Noise Sensitive Land Use (NSLU) to exterior or interior noise (including noise generated from the project, together with noise from roads [existing and planned Circulation Element roadways], railroads, airports, heliports and all other noise sources) in excess of any of the following:

- a. Exterior Locations:

- 60 CNEL; or
- An increase of 10 decibels over pre-existing noise.

- b. Interior Locations:

- 45 CNEL except for the following cases:

Rooms which are usually occupied only a part of the day (schools, libraries, or similar facilities), the interior one-hour average sound level due to noise outside should not exceed 50 dB(A)  $L_{eq}$ .

Corridors, hallways, stairwells, closets, bathrooms, or any room with a volume less than 490 cubic feet.

2. Project implementation would generate airborne noise which, together with noise from all sources, would be in excess of either of the following:
  - a. Non-Construction Noise: The limit specifies in San Diego County Code Section 36.404, Sound Level Limits, at or beyond the property line. Section 36.404 provides the following limits:

ZONE	PERIOD	APPLICABLE LIMIT ONE-HOUR AVERAGE SOUND LEVEL (dB(A) $L_{eq}$ )
R-S, R-D, R-R, R-MH, A-70, A-72, S-80, S-81, S-87, S-90, S-92, R-V, and R-U with a density of less than 11 dwelling units per acre.	7 AM to 10 PM	50
	10 PM to 7 AM	45
R-RO, R-C, R-M, S-86, V5, and R-V and R-U with a density of 11 or more dwelling units per acre.	7 AM to 10 PM	55
	10 PM to 7 AM	50
S94, V4, and all commercial zones	7:00 A.M. to 10:00 P.M.	60
	10:00 P.M. to 7:00 A.M.	55
V1	7:00 A.M. to 7:00 P.M.	60
	7:00 P.M. to 7:00 A.M.	55
V2	7:00 A.M. to 7:00 P.M.	60
	7:00 P.M. to 10:00 P.M.	55
	10:00 P.M. to 7:00 A.M.	50
V3	7:00 A.M. to 10:00 P.M.	70
	10:00 P.M. to 7:00 A.M.	65
M-50, M-52, and M-54	Anytime	70
S82, M56, and M58	Anytime	75

- b. Construction Noise: Noise generated by construction activities related to the project would exceed the standards listed in San Diego County Code Section 36.409, Sound Level Limitations on Construction Equipment. Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 dB(A)  $L_{eq}$  for an eight-hour period, between 7:00 A.M. and 7:00 P.M., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

### 3.5.3 Analysis of Project Effects and Determination as to Significance

#### ***Traffic-generated Noise (Guideline 1)***

A significant impact would occur if noise levels at exterior usable areas exceed 60 CNEL or if interior noise levels exceed 45 CNEL.

Traffic volumes used for the analysis of future traffic noise were obtained from the traffic report prepared for the Proposed Project. Year 2030 plus project traffic volumes were used. Future distances to 75 and 60 CNEL contour lines were calculated for each roadway assuming flat-site conditions. Flat-site contours are shown in Figure 3.5-2 and the flat-site contour distances from each roadway are summarized in Table 3.5-3. These contours do not take into account any noise attenuation that would be provided by vegetation, buildings, or topography. This would be considered a worst-case analysis and actual future noise levels at the Proposed Project would be less than those shown in Figure 3.5-2. The County Noise Element restricts residential development in areas where noise levels exceed 75 CNEL. As shown in Figure 3.5-2, the Proposed Project would not expose residences to noise levels greater than 75 CNEL.

Noise levels were modeled for a series of receivers located throughout the Proposed Project area to determine the future noise contours over the Proposed Project due to traffic on the surrounding roadways. Unlike the flat-site noise contours, these noise contours include the effects of future grading on the property and existing topography between I-15 and the Proposed Project. These contours do not take into account any noise mitigation measures or shielding provided by the proposed buildings or vegetation.

Future traffic noise levels for I-15 were based on the noise measurements shown in Table 3.5-1. The source of noise at Measurement Location 1 was traffic on I-15. This measurement was used to predict future noise levels due to traffic on I-15 at the receivers located at the multi-family site within PA 4, the school site in PA 2, and the multi-family site within PA 1 since these uses have a similar topographic relationship to I-15. The measured noise level at Measurement Location 1 was 58.6 dB(A)  $L_{eq}$ . This results in a future daytime noise level 61.3 dB(A)  $L_{eq}$ , which is equal to 65.0 CNEL.

The source of noise at Measurement Location A was also traffic on I-15. This measurement was used to predict future noise levels due to traffic on I-15 at the receivers located at the single-family portion within PA 5 of the Project Site since these uses are in the vicinity of Location A and have a similar elevated topographic relationship to I-15. The measured noise level at Measurement Location A was 53.2 dB(A)  $L_{eq}$ . This results in a future daytime noise level 55.9 dB(A)  $L_{eq}$  which is equal to 59.6 CNEL.

STAMINA was used to calculate the noise levels due to traffic on all roadways except I-15. The noise levels due to traffic on I-15 discussed above were added to the noise levels calculated by STAMINA. The resulting noise contours at five feet above the ground are shown in Figure 3.5-3. As shown, ground-level receivers closest to the area roadways could experience future traffic noise levels greater than 60 CNEL. The multi-family area in PA 4 could experience noise levels greater than 65 CNEL and the multi-family area in PA 1 could experience noise levels greater than 70 CNEL.

Noise levels were also modeled at 137 specific receiver locations in the backyards of the units and on the school site adjacent to the roadways. The locations of these 137 receivers are shown in Figure 3.5-4. For the multi-family area within PA 1 (Receivers 1 through 22), two-story buildings were modeled as barriers. For the multi-family portion area within PA 4 (Receivers 29 through 41) the buildings closest to Horse Ranch Creek Road were modeled as barriers. The resulting projected noise levels at these receivers are shown in Table 3.5-4. Table 3.5-5 lists the affected lots that correspond to the

receivers and noise levels shown in Table 3.5-4, as well as the lot elevations and proposed barrier elevations.

As seen from Table 3.5-4, exterior noise levels adjacent to the major roadways are projected to exceed the County's standard of 60 CNEL and impacts would be **significant (N-1)**.

As seen in Figure 3.5-4 and Table 3.5-4, even after the construction of the proposed barriers, second-floor exterior noise levels at the multi-family units are projected to exceed 60 CNEL. Therefore, interior noise levels cannot be assumed to be within the 45 CNEL standard. This represents a **significant impact. (N-2)**.

For the single-family area within PA5 of the Proposed Project, noise levels at receivers adjacent to roadways are not projected to exceed 60 CNEL after the construction of the proposed barriers. Therefore, interior noise levels are projected to be within the 45 CNEL standard. Impacts are **less than significant**.

For the school site, noise levels were refined by placing more receivers within the site. These receivers are shown in Figure 3.5-4 and the exterior noise levels for these receivers are summarized in Table 3.5-4. Assuming 20 decibels of exterior-to-interior reduction would result in interior noise levels of 50 dB(A)  $L_{eq}$  or less when exterior noise levels are 70 dB(A)  $L_{eq}$  or less. As discussed above, the average daytime noise level is approximately two decibels less than the CNEL for this analysis. As seen in Table 3.5-4, exterior noise levels are not projected to exceed 60 CNEL with constructed barriers. Therefore, interior noise levels due to exterior sources are not projected to exceed 50 dB(A)  $L_{eq}$ . Impacts are **less than significant**.

### ***Stationary Noise (Guideline 2)***

A significant impact would occur if construction noise exceeds an eight-hour average noise level of 75 dB(A)  $L_{eq}$  at a residential receptor or if stationary noise exceeds the applicable limits in the noise ordinance. These limits are summarized in Section 3.5.2 above.

### **Construction-generated Noise**

All construction would be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday as stated in the County of San Diego's Noise Abatement and Control Ordinance. However, noise associated with the demolition, earthwork, construction, and surface preparation for the Proposed Project will result in short-term impacts to adjacent residential properties. A variety of noise-generating equipment would be used during the construction phase of the Proposed Project such as scrapers, dump trucks, backhoes, front-end loaders, jackhammers, and concrete mixers, along with others. As discussed above, construction noise that exceeds an eight-hour average noise level of 75 dB(A)  $L_{eq}$  at the property line would be significant.

Table 3.5-6 indicates the types of construction equipment typically involved in construction projects. This type of equipment can individually generate noise levels that range between 78 and 91 dB(A)  $L_{eq}$  at 50 feet from the source, as listed in Table 3.5-6. Ground-clearing activities generally generate the greatest average construction noise levels. These activities are estimated to generate average noise levels of 83 to 84 dB(A)

$L_{eq}$  50 feet from the site of construction (Bolt, Beranek, and Newman, Inc. 1971). This value is based on empirical data on the number and types of equipment at a construction site and their average cycle of operation.

Construction noise generally can be treated as a point source and would attenuate at approximately six decibels for every doubling of distance. A grading noise level of 84 dB(A)  $L_{eq}$  would attenuate to 75 dB(A)  $L_{eq}$  at approximately 140 feet from the noise source.

As can be seen in Figure 3.5-1, the nearest residential property line is located adjacent to the southeast boundary of the Proposed Project adjacent to Rosemary's Mountain Rock Quarry. Grading activities will occur over the entire site and would not be situated at any one location for a long period of time. For a worst-case scenario, it was assumed that grading in an eight hour period would be centered in a two-acre area. Then the center of this small grading area would be located no closer than 150 feet from the property line. A noise level of 84 dB(A)  $L_{eq}$  at 50 feet would attenuate to 74 dB(A)  $L_{eq}$  at 150 feet. Therefore, construction noise levels due to grading do not have the potential to exceed County standards of 75 dB(A)  $L_{eq}$  at the property line and impacts related to on-site construction noise are **less than significant**.

Building construction would occur in phases. Residences constructed during earlier phases would be exposed to on-site building construction noise during later phases of the Proposed Project. However, construction work that could occur adjacent to newly occupied residences would primarily involve the use of hand tools and small machinery. Although the noise could be a nuisance to occupants of adjacent residences, it would not be expected to violate any standards.

Existing residences would be exposed to noise due to off-site construction that could be required as a result of the Proposed Project. A new signal would be installed at the intersection of Reche Road and Old Highway 395. This improvement would be a responsibility of the Proposed Project if the Proposed Project is constructed before the adjacent projects. The closest sensitive receptor is more than 600 feet away and installation would not generate significant noise levels. Therefore, noise impacts due to off-site construction are **less than significant**.

#### Rosemary's Mountain Rock Quarry

The future site of Rosemary's Mountain Rock Quarry is located directly east of the Proposed Project. Noise levels due to operations at Rosemary's Mountain Rock Quarry were analyzed to ensure that levels would not exceed the applicable limits in the County Noise Ordinance. The County Noise Ordinance states that the sound level limit at the property line for extractive industries, such as Rosemary's Mountain Rock Quarry, is an hourly average noise level of 75 dB(A)  $L_{eq(1)}$ . Noise levels are also discussed in terms of the CNEL to ensure that levels do not exceed 60 CNEL and, therefore, comply with County Noise Element 4b. The quarry documentation includes typical weekday hours of operation between 6:00 A.M. and 10:00 P.M. with the noisier activities stopping by 4:00 P.M.

The EIR for Rosemary's Mountain Rock Quarry (Mooney & Associates 1997) includes a mitigation measure and monitoring program to ensure that future residential development does not experience an hourly noise level in excess of 60 dB(A)  $L_{eq(1)}$  due



to mining and processing operations. The EIR indicates the location of the worst case average hourly 60 dB(A)  $L_{eq(1)}$  contour. Pursuant to the County Noise Element, CNEL measurement/calculations are required to ensure no new impacts would occur to noise sensitive land-uses on the Project Site. CNEL noise measurement is a 24 hour average. Taking into account the typical hours of operation, the CNEL was calculated by adding 10 decibels to the noise that occurs between 10:00 P.M. and 7:00 A.M. and adding 5 decibels to the noise that occurs between 7:00 P.M. and 10:00 P.M.

The 60 CNEL contour line would be located approximately 165 feet from the average hourly 60 dB(A)  $L_{eq(1)}$  contour line. In addition, the average hourly 50 dB(A)  $L_{eq(1)}$  contour would be located approximately 870 feet from the average hourly 60 dB(A)  $L_{eq(1)}$  contour. Figure 3.5-5 shows the worst case average hourly 60 dB(A)  $L_{eq(1)}$  noise contour from Rosemary's Mountain Rock Quarry EIR, an estimate of the location of the average hourly 50 dB(A)  $L_{eq(1)}$  noise contour, and an estimate of the location of the 60 CNEL noise contour. The hourly 50 dB(A)  $L_{eq(1)}$  contour is approximately 870 feet from the hourly 60 dB(A)  $L_{eq(1)}$  contour. As shown, noise levels are not projected to exceed the hourly noise level of 60 dB(A)  $L_{eq(1)}$  and, therefore, Rosemary's Mountain Rock Quarry complies with the County Noise Ordinance for extractive industries. As also shown, noise levels are not projected to exceed 60 CNEL at the proposed residences and, therefore complies with the County Noise Element 4b and impacts would be **less than significant**.

Noise from the quarry may be considered a nuisance to future residences. Lots within the average hourly 50 dB(A)  $L_{eq}$  contour would be affected by Quarry operations. Lots near modeled receivers 42 through 44 and 48 through 73 would notice Quarry operations more because of their location and the lower traffic noise conditions. Lots near Horse Ranch Creek Road would notice noise due to Quarry operations less because of the higher traffic noise levels.

As a project design consideration, lots within the 50 dB(A)  $L_{eq(1)}$  contour would receive the following notice prior to purchase:

This property is located adjacent to Rosemary's Mountain Rock Quarry. Noise levels due to operations at the Quarry are projected to exceed 50 decibels one-hour Leq at this property, but will not exceed 60 decibels one-hour Leq.

Blasting would occur once a week at the Quarry. The duration of an individual blast is on the order seconds or less than a second. At a distance removed from the quarry, a blast would likely be heard as an indistinct rumbling sound.

With the Quarry's compliance with its mitigation and monitoring program, and notification described above, noise levels at Proposed Project residences due to quarry operations will be **less than significant**.

#### Wastewater Treatment Plant

The Proposed Project includes the construction and operation of a Wastewater Treatment Plant (WWTP) on an approximate one-acre site. Figure 1-7 shows the location of the proposed on-site facility. Noise associated with operation of the on-site WWTP was analyzed to ensure that noise levels would not exceed the applicable

County Noise Ordinance standards of (50 dB(A)  $L_{eq}$  from 7:00 A.M. to 10:00 P.M. and 45 dB(A)  $L_{eq}$  from 10:00 P.M. to 7:00 A.M).

A noise analysis to address potential noise impacts to adjacent residential units from the WWTP was performed. A reference noise level of 70 dB(A)  $L_{eq}$  was used for the WWTP. This is based on a noise analysis done for a 25 MGD facility located in the city of Oceanside (RECON 2006). This facility is larger than the proposed WWTP. The noise producing equipment at the 25 MGD facility, which included a blower room, odor scrubbers, screens and augers, mixers, exhaust fans, air compressors, and air conditioners, is similar to the equipment that would be used at the proposed facility. This noise level does not account for noise reduction provided by locating any equipment inside enclosed buildings. This noise level is also based on data from a facility much larger than the proposed facility. Therefore, 70 dB(A)  $L_{eq}$  at 50 feet is a conservative reference noise level.

This analysis assumed that the main noise source associated with the operation of the WWTP would be located at the center of the building at the west end of the site (see Figure 1-7). The closest on-site residential property line is located approximately 95 feet north of the center of the WWTP building. Assuming six decibels reduction for every doubling of distance, 70 dB(A)  $L_{eq}$  at 50 feet would attenuate to 64 dB(A)  $L_{eq}$  at 95 feet. Therefore, should the on-site WWTP option be constructed, the noise level at the residential property line due to the WWTP would be 64 dB(A)  $L_{eq}$ . Because County noise standards limit noise levels at the property line to 50 dB(A)  $L_{eq}$  during the day and 45 dB(A)  $L_{eq}$  at night, impacts are **significant (N-3)**.

### 3.5.4 Cumulative Impact Analysis

#### *Traffic-generated Noise*

The Proposed Project will contribute traffic to off-site roads as well as on-site roads. An increase of three decibels is considered a perceptible increase in noise. A significant impact would occur if project implementation will expose on- or off-site, existing and planned NSLU to road noise three decibels over existing noise levels and are not to exceed 65 CNEL. The specified existing noise levels are for NSLU with site conditions greater than 58 CNEL. Additionally, a potentially cumulatively considerable impact could occur if the project is shown to produce more than a one decibel increase in noise levels.

Table 3.5-7 summarizes the existing ADT, the existing plus project ADT the existing plus cumulative ADT, the existing plus cumulative plus project ADT, the year 2030 without the project ADT, the year 2030 plus the project ADT, and the corresponding increases in noise. The year 2030 plus project ADT includes the future projected traffic volumes as well as the buildout traffic volumes associated with this project and other pending projects in the vicinity. Traffic volumes were obtained from the traffic report prepared for the Proposed Project (LOS Engineering 2009).

As shown in Table 3.5-7, the greatest direct increase in noise resulting from adding project-related ADT to the existing ADT is 1.3 decibels and is located on SR-76 between the I-15 northbound ramps and Horse Ranch Creek Road and on Old Highway 395 between Reche Road and Stewart Canyon Road. The greatest increase in noise resulting from adding project ADT to existing plus cumulative ADT is 1.1 decibels located on Horse Creek Ranch Road between Street A and Street Q and between Street Q and

Street R. The greatest increase in noise resulting from adding project ADT to year 2030 ADT is also 1.1 decibels located on Horse Creek Ranch Road between Street A and Street Q and between Street Q and Street R. The 1.1 decibel increase is not significant at this location because there are no current residential structures along this roadway segment. An increase in noise levels at all other locations is one decibel or less. Therefore, impacts are **less than significant**.

### ***Construction-generated Noise***

Construction noise due to the Proposed Project alone is not projected to exceed the noise ordinance standards. A number of projects are planned in the vicinity of the Proposed Project. The Campus Park, Campus Park West, and Palomar College projects are located adjacent to the Proposed Project. As discussed above, the nearest residential property line is adjacent to the southeast boundary of the Project Site. A grading noise level of 84 dB(A)  $L_{eq}$  at 50 feet would attenuate to 74 dB(A)  $L_{eq}$  at 150 feet. The next closest project to this residential property line is the Campus Park project more than 1,000 feet to the west. A grading noise level of 84 dB(A)  $L_{eq}$  at 50 feet would attenuate to 58 dB(A)  $L_{eq}$  at 1,000 feet. When combining cumulative noise sources, there is no change in the total noise level if a noise level is 10 decibels less than the other. Therefore, noise due to construction of the Proposed Project would not be cumulatively considerable when combined with the construction related noise of cumulative projects and impacts would be **less than significant**.

### **3.5.5 Mitigation Measures Proposed to Minimize the Significant Effects**

**M-N-1** The Proposed Project shall construct noise attenuation barriers ranging from three to ten feet along the edge of the residential pads, as shown in Figures 3.5-4 and 3.5-7. Barriers shall be free of cracks and holes. The transmission loss through a barrier should be at least 10 decibels greater than the estimated barrier attenuation (Federal Highway Administration 1979:34). If a barrier attenuates noise levels by 10 decibels at a receiver location, the barrier transmission loss must be at least 20 decibels to prevent audible noise from traveling through the barrier and adding to the acoustical environment. Examples of acceptable barrier materials include, but are not limited to, masonry block, wood frame with stucco, 0.5-inch-thick Plexiglas, or 0.25-inch-thick plate glass. If transparent barrier materials are used, no gaps shall occur between the panels.

Figure 3.5-6 shows the barriers that would be required if the Campus Park project was constructed before the Proposed Project. As shown in Figure 3.5-6, several noise barriers at the southwest portion of Planning Area 1 as shown on Figure 3.5-4 would not be required with development of the Campus Park project.

**M-N-2** A noise protection easement shall be placed on those lots where exterior noise levels exceed 60 CNEL to assure that at such time as architectural plans are available, and prior to the issuance of building permits, an interior acoustical analysis shall be conducted in accordance with the State Building Code and County standards. If interior allowable noise levels are met by requiring that windows be unopenable or closed, the design for the structure must also specify a ventilation or air-conditioning

system to provide a habitable interior environment, as specified in the State Building Code.

- M-N-3** To reduce noise levels from the WWTP, the Proposed Project shall construct a 10-foot barrier at the property line south of Planning Area 1 and north of SR-76.

### 3.5.6 Conclusion

Traffic generated noise at exterior receivers will be significant (N-1). M-N-1 requires the construction of noise barriers. These barriers would provide effective protection from audible intrusion. Implementation of this measure would reduce noise impacts to a level that is less than significant.

Interior noise levels of second floor receivers of the multi-family lots adjacent to the roadways could exceed allowable noise levels (N-2). M-N-2 requires an interior analysis of those receivers to be conducted when specific building plans are available to determine whether interior noise levels will exceed 45 CNEL. This mitigation measure would be effective in identifying those units where additional noise reduction measures may be indicated allowing a reduction in interior noise to a level that is less than significant.

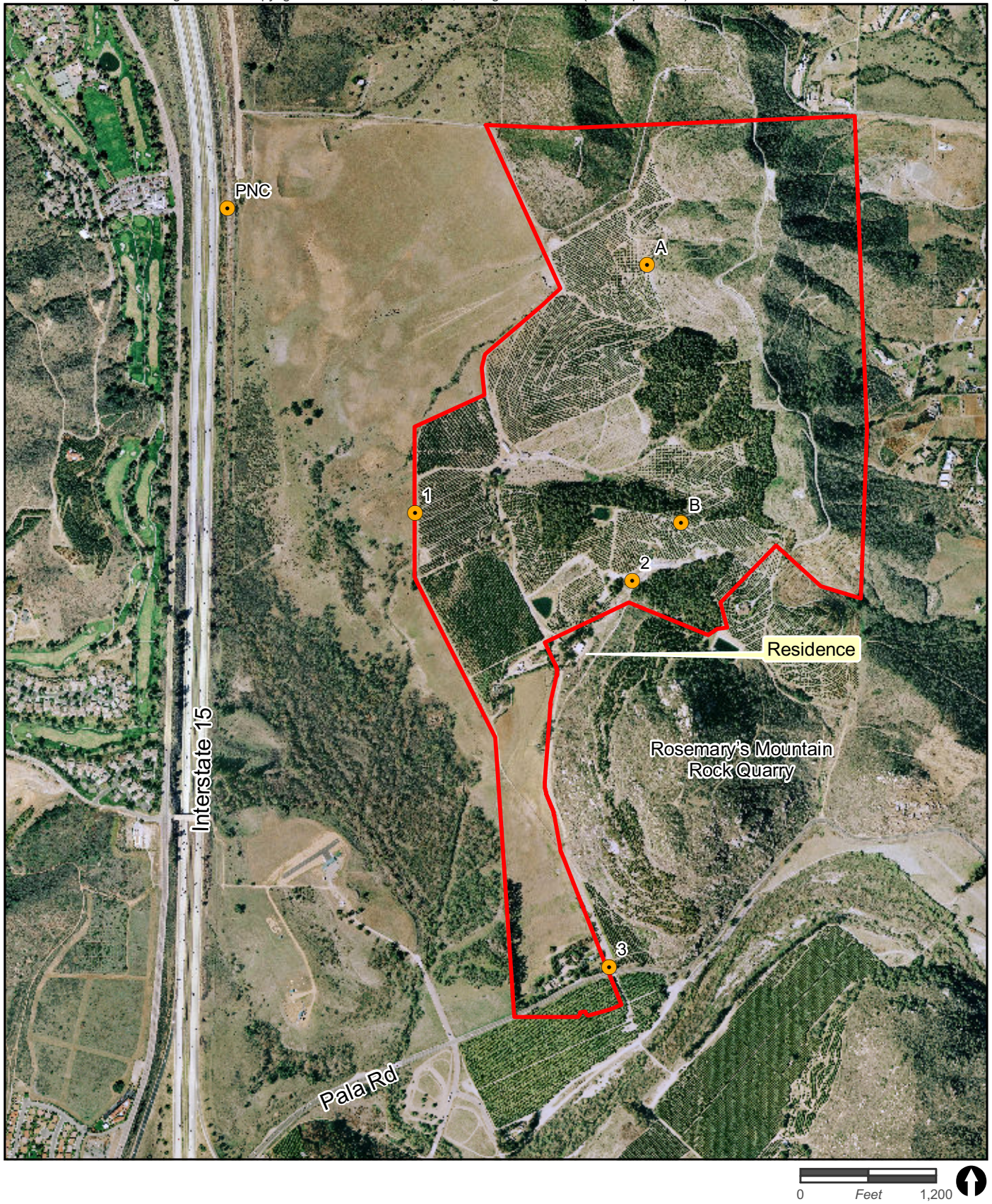
As discussed above, the acoustic center of grading activities would be no closer than 150 feet from the property line of the closest residence. Therefore, construction noise levels due to grading do not have the potential to exceed County standards. No mitigation is required.

Additionally, because the closest sensitive receptor is more than 600 feet away from proposed off-site improvements including road construction and utility expansions, noise impacts due to off-site construction are less than significant.

Noise levels due to operations at Rosemary's Mountain Rock Quarry would not exceed an hourly noise level of 60 dB(A)  $L_{eq(1)}$  at the proposed residences. With the Quarry's compliance with its mitigation and monitoring program and the project notification to prospective buyers, noise levels at Proposed Project residences due to quarry operations will be less than significant.

Noise at exterior receivers due to the WWTP will be significant (N-3). M-N-3 is the same as M-N-1 requiring the construction of a noise barrier. Specifically a 10-foot barrier proposed south of the residences in Planning Area 1 would reduce noise impacts to a level that is less than significant.





- Project Boundary
- Measurement Locations

FIGURE 3.5-1  
Aerial Photograph of Project and  
Noise Measurements Locations



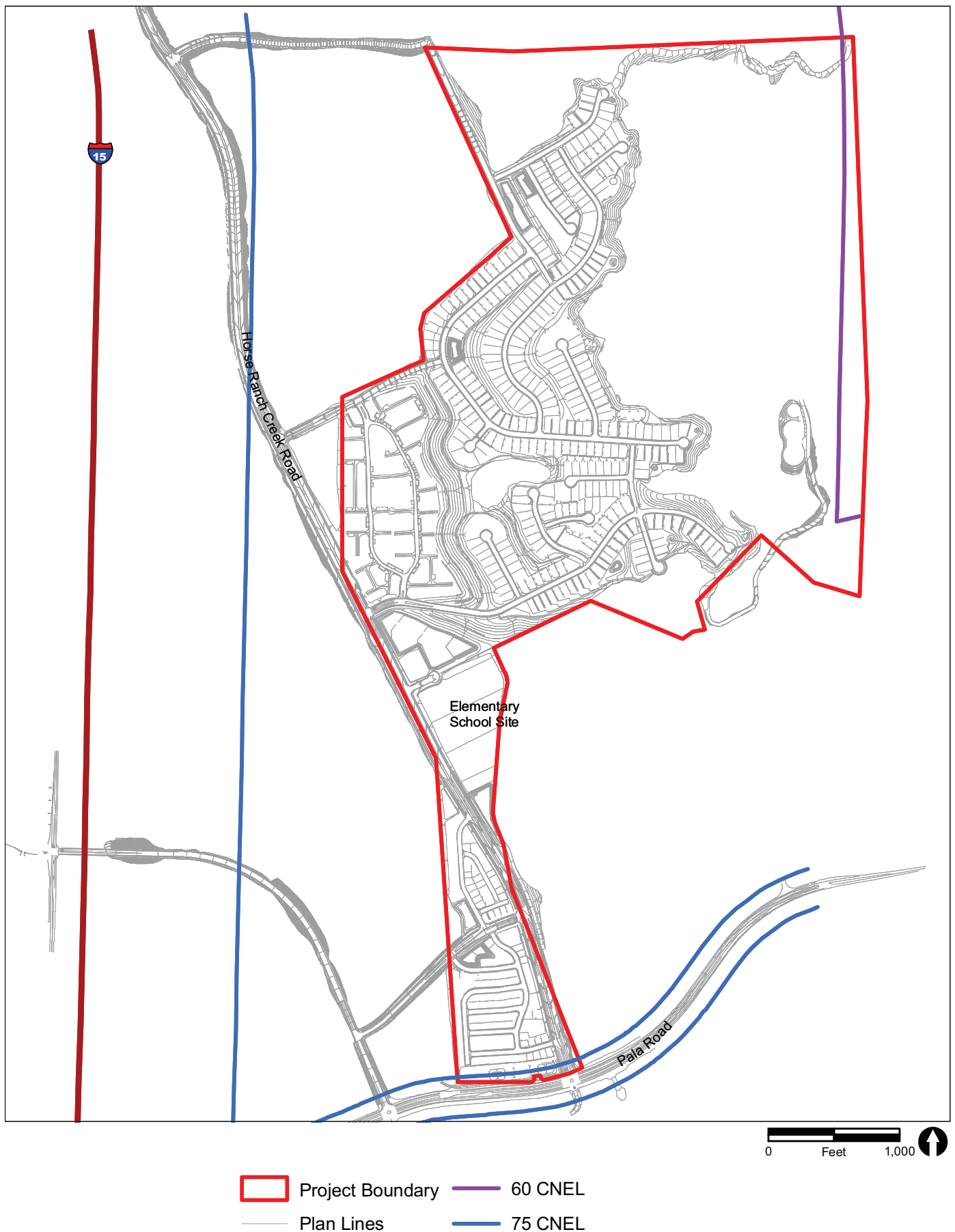
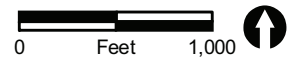
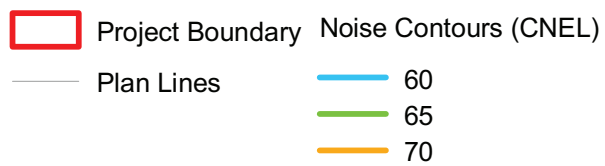
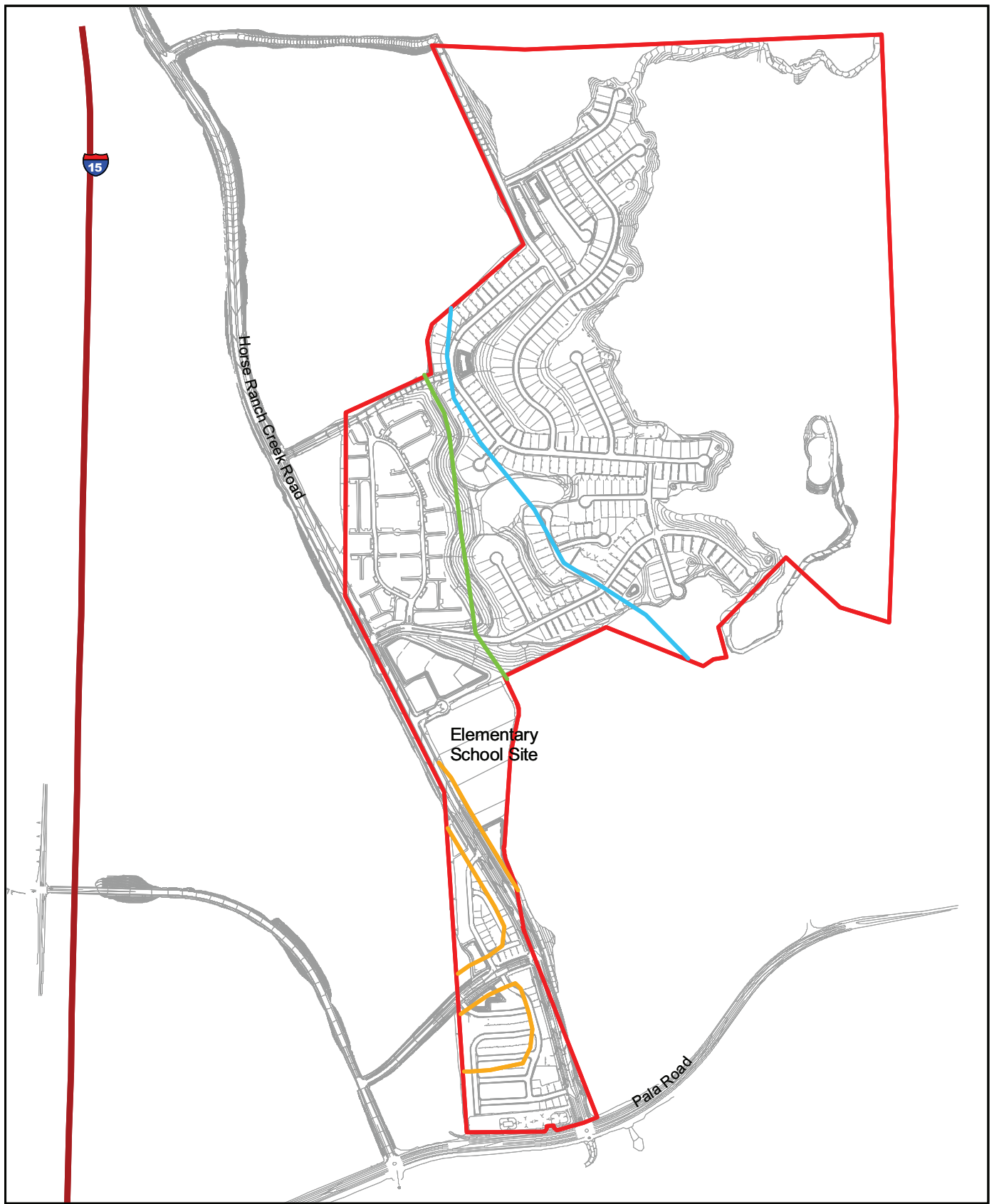


FIGURE 3.5-2

Flat-Site Roadway Noise Contours



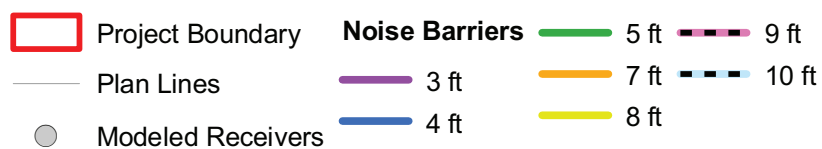
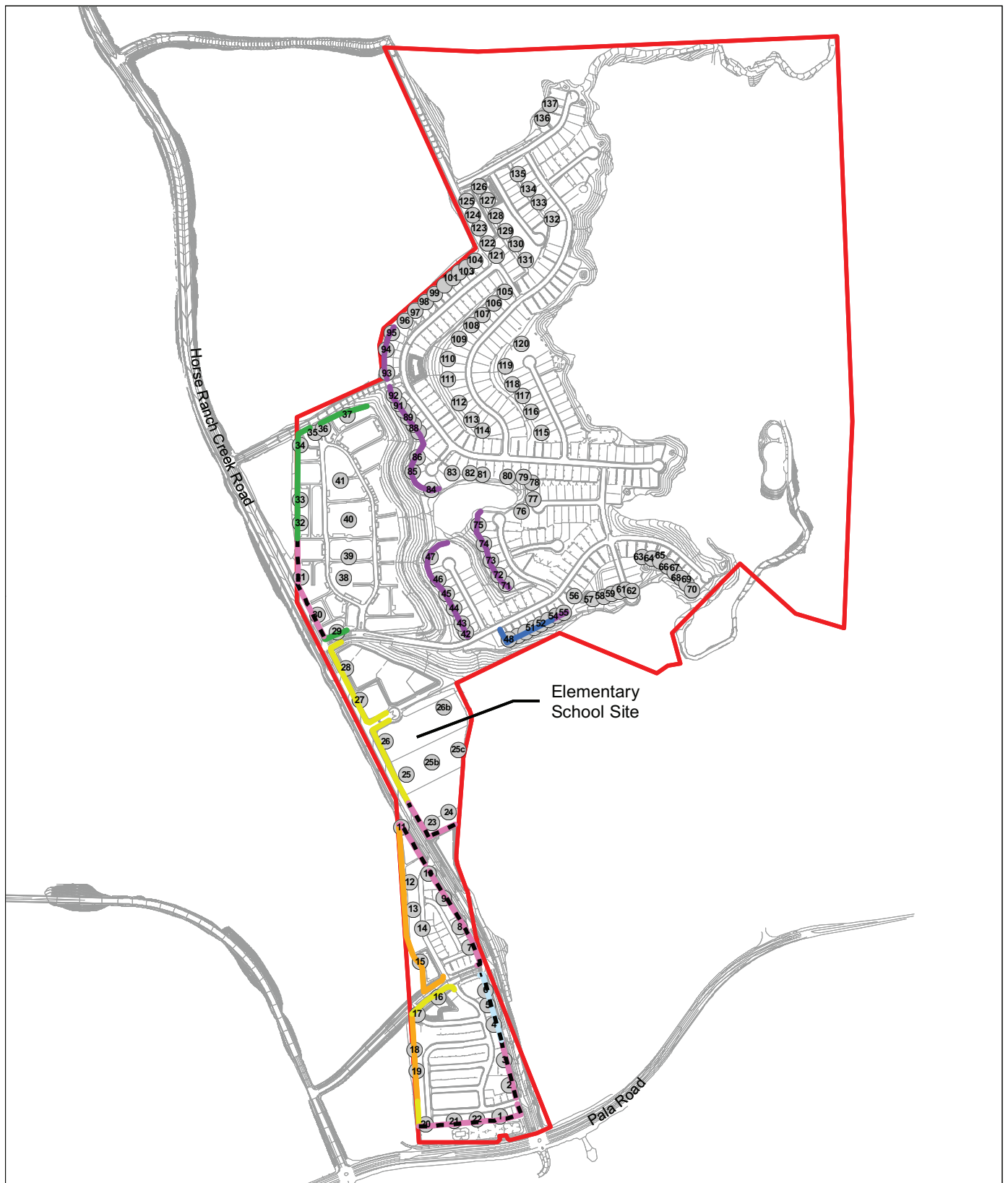
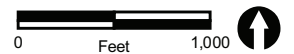
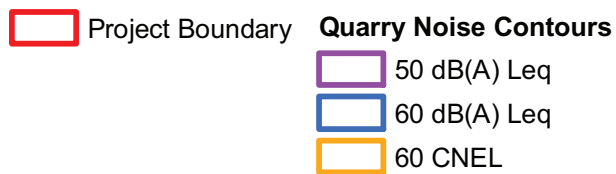
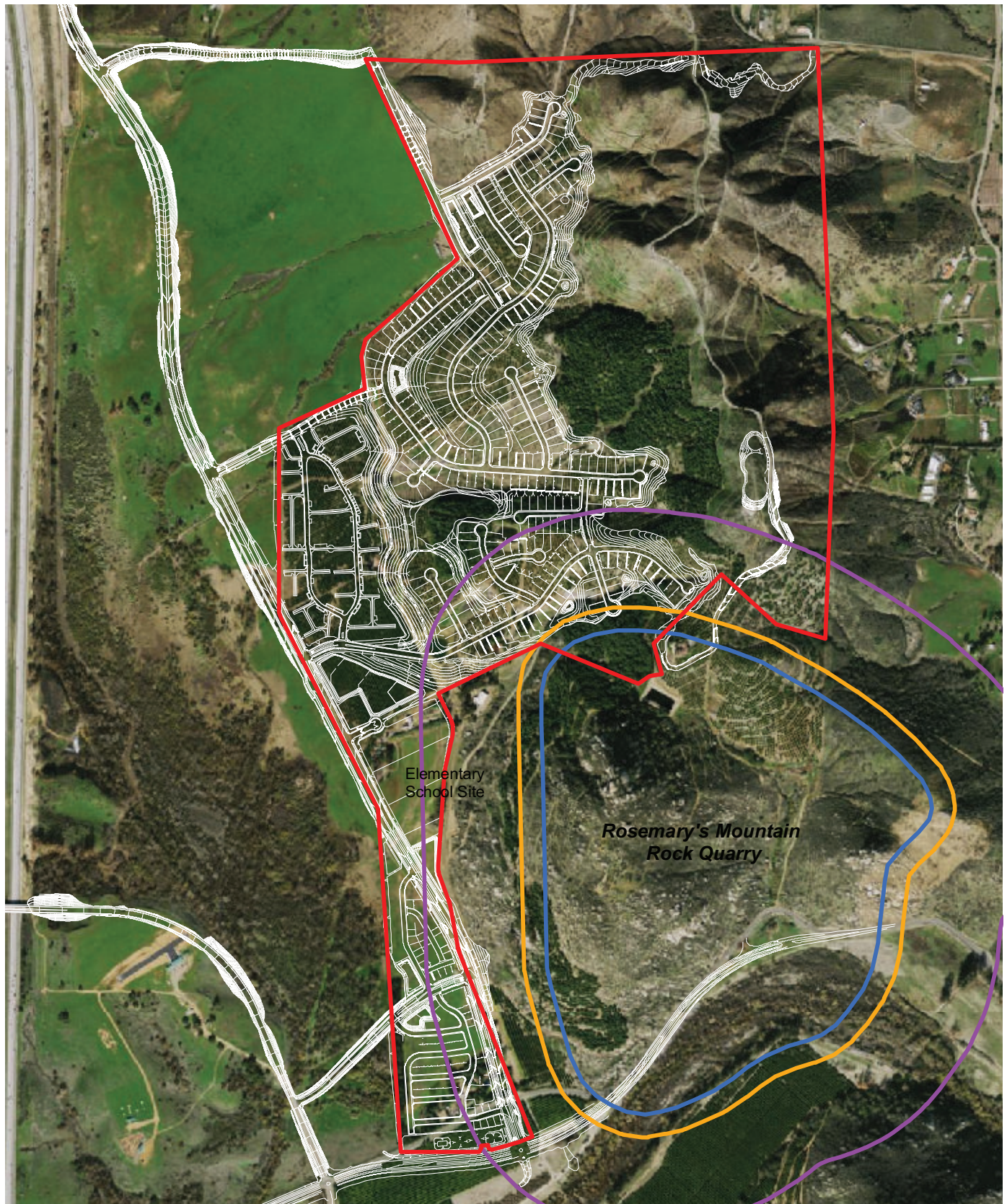


FIGURE 3.5-4  
Modeled Receivers and Noise Barrier Locations







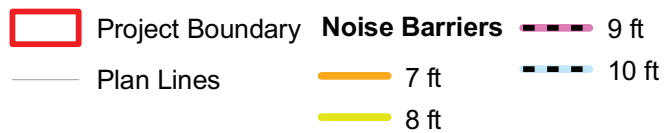


FIGURE 3.5-6

Proposed Noise Barriers with  
Construction of Campus Park Project

**TABLE 3.5-1  
SHORT-TERM MEASUREMENT RESULTS**

Location	Date	Duration (Minutes)	Average Noise Level [dB(A) L <sub>eq</sub> ]	Modeled Noise Level [dB(A) L <sub>eq</sub> ]	Traffic Noise Sources	Distance from Source
1	07/14/2005	20	58.6		I-15	N/A
2	07/14/2005	20	45.7	Not Modeled	I-15 and Pala Road	N/A
3	07/14/2005	20	68.6	Not Modeled	Pala Road	50 feet from centerline
A	11/13/2006	15	53.2		I-15	3,900 from centerline
B	11/13/2006	15	52.0		I-15	4,250 from centerline

**TABLE 3.5-2**  
**MEASUREMENT 4 HOURLY AVERAGE NOISE LEVELS**

Date	Start Hour	Average Hourly Noise Level [dB(A) $L_{eq}$ ]
August 23, 2005	2:00 P.M.	79
	3:00 P.M.	79
	4:00 P.M.	80
	5:00 P.M.	80
	6:00 P.M.	79
	7:00 P.M.	78
	8:00 P.M.	77
	9:00 P.M.	76
	10:00 P.M.	76
	11:00 P.M.	74
August 24, 2005	12:00 A.M.	72
	1:00 A.M.	71
	2:00 A.M.	70
	3:00 A.M.	71
	4:00 A.M.	74
	5:00 A.M.	76
	6:00 A.M.	78
	7:00 A.M.	78
	8:00 A.M.	78
	9:00 A.M.	78
	10:00 A.M.	77
	11:00 A.M.	77
	12:00 P.M.	77
	1:00 P.M.	78
	2:00 P.M.	78
	3:00 P.M.	79
	4:00 P.M.	79
	5:00 P.M.	79
	6:00 P.M.	79
	7:00 P.M.	77
	8:00 P.M.	77
	9:00 P.M.	76
	10:00 P.M.	75
	11:00 P.M.	74
August 25, 2005	12:00 A.M.	72
	1:00 A.M.	70
	2:00 A.M.	70
	3:00 A.M.	71
	4:00 A.M.	74
	5:00 A.M.	77
	6:00 A.M.	78
	7:00 A.M.	78
	8:00 A.M.	78
	9:00 A.M.	78
	10:00 A.M.	77
	11:00 A.M.	77



**TABLE 3.5-3  
FLAT-SITE ROADWAY CONTOUR DISTANCES (feet)**

Roadway	Distance to 75 CNEL Contour Line	Distance to 60 CNEL Contour Line
SR-76	150	2,713
Street R	18	554
Pala Mesa Drive	13	404
Horse Ranch Creek Road		
SR-76 to Street 'R'	18	566
Street 'R' to Street 'Q'	30	950
Street 'Q' to Street 'A'	30	941
Street 'A' to Street 'B'	27	866
Street 'B' to Longspur Road	21	666
Longspur Road to Baltimore Oriole Drive	15	475
I-15	1,183	5,684

**TABLE 3.5-4  
PROJECTED TRAFFIC NOISE LEVELS  
(CNEL)**

Receiver	Noise Level: No Barrier First Floor	Noise Level: No Barrier Second Floor	Noise Level: Constructed Barrier First Floor	Noise Level: Constructed Barrier Second Floor
1	72	73	60	73
2	70	71	60	69
3	71	71	60	71
4	70	70	60	69
5	70	70	59	68
6	71	71	60	71
7	70	71	60	68
8	71	71	59	70
9	71	71	59	70
10	71	71	60	71
11	71	72	60	71
12	66	66	57	66
13	66	66	58	66
14	66	66	58	66
15	66	67	57	66
16	69	71	60	69
17	69	70	60	68
18	68	68	58	68
19	67	68	58	68
20	72	72	59	72
21	72	72	60	72
22	72	72	60	72
23	68	70	60	67
24	67	67	59	66
25	68	69	60	67
25b	68	70	60	67
25c	69	71	59	69
26	69	70	60	68
26b	67	67	60	67
27	70	71	60	69
28	70	70	60	69
29	67	67	60	67
30	67	67	59	67
31	66	66	58	66
32	65	65	56	65
33	65	65	56	65
34	65	65	56	65
35	56	57	55	56
36	56	56	55	56
37	55	56	55	55
38	55	56	55	55
39	61	62	60	62
40	61	62	60	62
41	72	73	60	73
42	70	71	60	69
43	71	71	60	71

**TABLE 3.5-4**  
**PROJECTED TRAFFIC NOISE LEVELS**  
**(CNEL)**  
**(continued)**

Receiver	Noise Level: No Barrier First Floor	Noise Level: No Barrier Second Floor	Noise Level: Constructed Barrier First Floor	Noise Level: Constructed Barrier Second Floor
44	62	62	60	62
45	61	62	60	62
46	61	62	60	62
47	61	62	60	61
48	61	61	60	61
49	61	61	59	61
50	61	61	59	61
51	61	61	60	61
52	61	61	59	61
53	61	61	60	61
54	61	61	60	61
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57	60	61	60	61
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67	60	61	60	61
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76	60	60	60	60
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81	60	60	60	60
82	60	60	60	60
83	60	60	60	60
84	61	61	60	61
85	61	61	60	61
86	61	61	60	61
87	60	61	59	61
88	60	61	59	61
89	61	61	60	61
90	60	61	59	61
91	61	61	60	61

**TABLE 3.5-4**  
**PROJECTED TRAFFIC NOISE LEVELS**  
**(CNEL)**  
**(continued)**

Receiver	Noise Level: No Barrier First Floor	Noise Level: No Barrier Second Floor	Noise Level: Constructed Barrier First Floor	Noise Level: Constructed Barrier Second Floor
92	61	61	60	61
93	61	61	60	61
94	61	61	60	61
95	60	61	60	61
96	60	60	60	60
97	60	60	60	60
98	60	60	60	60
99	60	60	60	60
100	60	60	60	60
101	60	60	60	60
102	60	60	60	60
103	60	60	60	60
104	60	60	60	60
105	60	60	60	60
106	60	60	60	60
107	60	60	60	60
108	60	60	60	60
109	60	60	60	60
110	60	60	60	60
111	60	60	60	60
112	60	60	60	60
113	60	60	60	60
114	60	60	60	60
115	60	60	60	60
116	60	60	60	60
117	60	60	60	60
118	60	60	60	60
119	60	60	60	60
120	60	60	60	60
121	60	60	60	60
122	60	60	60	60
123	60	60	60	60
124	60	60	60	60
125	60	60	60	60
126	60	60	60	60
127	60	60	60	60
128	60	60	60	60
129	60	60	60	60
130	60	60	60	60
131	60	60	60	60
132	60	60	60	60
133	60	60	60	60
134	60	60	60	60
135	60	60	60	60
136	60	60	60	60
137	60	60	60	60



**TABLE 3.5-5  
LOT AND BARRIER ELEVATIONS**

Lot	Corresponding Receiver	Lot Elevation (feet)	Top of Barrier Elevation (feet)	Barrier Height (feet)
LOT A	11	281	West barrier – 288 East barrier – 290	West barrier – 7 East barrier – 9
359	10	282	291	9
360	12	281	288	7
361	12	281	288	7
362	12	280	287	7
363	12	280	287	7
364	13	279	286	7
365	13	279	286	7
366	13	278	285	7
367	13	278	285	7
368	14	277	284	7
369	14	277	284	7
370	14	276	283	7
371	14	276	283	7
372	15	276	283	7
373	15	275	282	7
374	15	275	282	7
375	15	274	281	7
376	15	274	281	7
391	10	281	290	9
392	10	280	289	9
394	9	279	288	9
395	9	279	288	9
396	9	279	288	9
397	9	279	288	9
398	9	279	288	9
399	8	279	288	9
400	8	279	288	9
401	8	279	288	9
402	8	278	287	9
403	7	277	286	9
404	7	277	286	9
415	6	281	290	9
416	6	281	290	9
418	5	283	292	9
419	5	284	293	9
420	5	285	294	9
421	4	286	295	9
422	4	287	296	9
423	4	287	296	9
424	4	287	296	9
425	3	286	295	9
426	3	286	295	9
427	3	285	294	9
428	3	285	294	9
LOT Y	2	282	291	9
434	2	279	288	9
435	2	280	289	9
436	1	280	289	9

**TABLE 3.5-5  
LOT AND BARRIER ELEVATIONS  
(CONTINUED)**

Lot	Corresponding Receiver	Lot Elevation (feet)	Top of Barrier Elevation (feet)	Barrier Height (feet)
437	1	281	290	9
438	1	282	291	9
439	1	283	292	9
440	22	283	292	9
441	22	282	291	9
442	22	282	291	9
443	22	282	291	9
444	21	281	290	9
445	21	281	290	9
446	21	280	289	9
447	21	280	289	9
448	20	279	South barrier – 288 West barrier - 287	South barrier – 9 West barrier – 8
449	20	279	287	8
450	20	278	286	8
451	19	279	286	7
452	19	279	286	7
453	19	280	287	7
454	19	280	287	7
455	19	281	288	7
456	19	281	288	7
457	19	281	288	7
458	18	282	289	7
459	18	282	289	7
460	18	282	289	7
461	18	282	289	7
462	17	283	290	7
LOT M	16	280	West barrier – 287 North barrier - 288	West barrier – 7 North barrier - 8
School	23	280	289	9
School	24	285	294	9
School	25	292	300	8
School	26	298	306	8
Park	27	305	313	8
Park	28	310	318	8
Multi-family lot	29	314	South barrier – 319 West barrier – 323	South barrier – 5 West barrier – 9
Multi-family lot	30	311	320	9
Multi-family lot	31	314	323	9
Multi-family lot	32	317	322	5
Multi-family lot	33	319	324	5
Multi-family lot	34	322.5	327.5	5
Multi-family lot	35	324	329	5
Multi-family lot	36	325.5	330.5	5
Multi-family lot	37	325.5	330.5	5
Multi-family lot	38	313	No barrier	No barrier
Multi-family lot	39	315.5	No barrier	No barrier
Multi-family lot	40	318	No barrier	No barrier
Multi-family lot	41	320	No barrier	No barrier
1	42	416.5	319.5	3
2	43	418.5	421.5	3
3	43	421.5	424.5	3

**TABLE 3.5-5  
LOT AND BARRIER ELEVATIONS  
(CONTINUED)**

Lot	Corresponding Receiver	Lot Elevation (feet)	Top of Barrier Elevation (feet)	Barrier Height (feet)
4	44	424.5	427.5	3
5	44	426.5	429.5	3
6	45	427	430	3
7	45	427	430	3
8	46	427	430	3
9	46	426.5	429.5	3
10	47	426.5	429.5	3
11	47	426.5	429.5	3
78	48	425.5	429.5	4
79	49	430.5	434.5	4
80	50	437.5	441.5	4
81	51	446	450	4
82	52	451.5	455.5	4
83	53	456.5	460.5	4
84	54	460.5	464.5	4
85	55	462.5	466.5	4
92	56	471	No barrier	No barrier
91	57	487	No barrier	No barrier
90	58	498.5	No barrier	No barrier
89	59	508	No barrier	No barrier
88	60	513.5	No barrier	No barrier
87	61	516.5	No barrier	No barrier
86	62	517.5	No barrier	No barrier
102	63	534.5	No barrier	No barrier
103	64	542	No barrier	No barrier
104	65	558	No barrier	No barrier
105	66	573.5	No barrier	No barrier
106	67	584.5	No barrier	No barrier
107	68	592.5	No barrier	No barrier
108	69	600	No barrier	No barrier
109	70	605.5	No barrier	No barrier
27	71	477	480	3
28	72	479	482	3
29	73	480.5	483.5	3
30	73	483	486	3
31	73	485	488	3
32	74	487	490	3
33	74	488.5	491.5	3
34	75	490.5	493.5	3
35	75	493	496	3
36	76	493	No barrier	No barrier
69	76	493.5	No barrier	No barrier
70	77	494	No barrier	No barrier
273	78	465	No barrier	No barrier
272	79	461	No barrier	No barrier
271	79	457.5	No barrier	No barrier
270	80	453.5	No barrier	No barrier
269	80	450	No barrier	No barrier
268	80	446.5	No barrier	No barrier
267	81	443	No barrier	No barrier
266	82	439.5	No barrier	No barrier
265	82	436.5	No barrier	No barrier

**TABLE 3.5-5  
LOT AND BARRIER ELEVATIONS  
(CONTINUED)**

Lot	Corresponding Receiver	Lot Elevation (feet)	Top of Barrier Elevation (feet)	Barrier Height (feet)
264	83	433	No barrier	No barrier
463	83	426.5	No barrier	No barrier
262	83	424.5	No barrier	No barrier
261	84	424.5	427.5	3
260	85	424.5	427.5	3
259	86	424.5	427.5	3
258	86	424.5	427.5	3
257	86	425.5	428.5	3
254	87	420	423	3
253	87	416.5	419.5	3
252	88	412.5	415.5	3
251	89	409	412	3
250	90	405.5	408.5	3
249	91	402	405	3
248	92	399	402	3
247	93	394.5	397.5	3
246	93	394	397	3
245	94	394.5	397.5	3
244	94	395	398	3
243	95	397	400	3
242	96	400	No barrier	No barrier
241	96	403.5	No barrier	No barrier
240	97	407.5	No barrier	No barrier
239	98	412	No barrier	No barrier
238	98	416.5	No barrier	No barrier
237	99	421	No barrier	No barrier
236	100	425.5	No barrier	No barrier
235	100	430	No barrier	No barrier
234	101	434	No barrier	No barrier
233	102	438	No barrier	No barrier
232	103	442	No barrier	No barrier
231	104	445.5	No barrier	No barrier
230	104	446.5	No barrier	No barrier
182	105	463.5	No barrier	No barrier
183	105	463	No barrier	No barrier
184	106	462	No barrier	No barrier
185	106	461.5	No barrier	No barrier
186	107	461	No barrier	No barrier
187	107	460.5	No barrier	No barrier
188	108	459.5	No barrier	No barrier
189	108	459	No barrier	No barrier
190	109	458.5	No barrier	No barrier
191	109	458	No barrier	No barrier
192	110	457.5	No barrier	No barrier
193	110	457	No barrier	No barrier
194	111	456.5	No barrier	No barrier
195	111	456	No barrier	No barrier
196	112	455.5	No barrier	No barrier
197	112	455	No barrier	No barrier
198	112	454.5	No barrier	No barrier
199	113	453.5	No barrier	No barrier
200	113	453	No barrier	No barrier



**TABLE 3.5-5  
LOT AND BARRIER ELEVATIONS  
(CONTINUED)**

Lot	Corresponding Receiver	Lot Elevation (feet)	Top of Barrier Elevation (feet)	Barrier Height (feet)
201	114	452.5	No barrier	No barrier
202	114	452	No barrier	No barrier
146	115	478	No barrier	No barrier
147	115	477	No barrier	No barrier
148	115	476.2	No barrier	No barrier
144	116	480	No barrier	No barrier
145	116	479	No barrier	No barrier
142	117	482	No barrier	No barrier
143	117	481	No barrier	No barrier
140	118	484	No barrier	No barrier
141	118	483	No barrier	No barrier
138	119	486	No barrier	No barrier
139	119	485	No barrier	No barrier
136	120	486	No barrier	No barrier
137	120	486	No barrier	No barrier
283	121	456.5	No barrier	No barrier
284	121	453	No barrier	No barrier
285	121	449.5	No barrier	No barrier
286	121	447	No barrier	No barrier
287	122	445.5	No barrier	No barrier
288	122	444	No barrier	No barrier
289	123	442.5	No barrier	No barrier
290	123	442	No barrier	No barrier
291	124	441.8	No barrier	No barrier
292	124	442.5	No barrier	No barrier
293	125	443.7	No barrier	No barrier
294	125	445.7	No barrier	No barrier
295	125	447.3	No barrier	No barrier
296	126	465	No barrier	No barrier
297	126	265.6	No barrier	No barrier
298	127	466.2	No barrier	No barrier
299	127	466.8	No barrier	No barrier
300	128	467.5	No barrier	No barrier
301	128	469	No barrier	No barrier
302	129	471.1	No barrier	No barrier
303	129	472.5	No barrier	No barrier
304	130	474.5	No barrier	No barrier
305	130	476	No barrier	No barrier
306	131	477.5	No barrier	No barrier
307	131	478.5	No barrier	No barrier
326	132	490.5	No barrier	No barrier
325	132	489	No barrier	No barrier
324	133	487.5	No barrier	No barrier
323	133	486.5	No barrier	No barrier
322	134	486.9	No barrier	No barrier
321	134	485.9	No barrier	No barrier
320	135	485	No barrier	No barrier
319	135	484	No barrier	No barrier
318	135	483.1	No barrier	No barrier
355	136	502.5	No barrier	No barrier
354	137	513	No barrier	No barrier
353	137	518	No barrier	No barrier

**TABLE 3.5-6  
MEASURED NOISE LEVELS OF  
COMMON CONSTRUCTION EQUIPMENT**

Equipment	Approximate Noise Level (dB(A) $L_{eq}$ )
Air compressor	81
Backhoe	85
Concrete Mixer	85
Dozer	80
Generator	78
Grader	85
Jackhammer	88
Loader	79
Paver	89
Pneumatic tool	86
Saw	78
Scraper	88
Truck	91

SOURCE: Bolt, Beranek, and Newman 1971.

NOTE: Noise levels at 50 feet from the source.

**TABLE 3.5-7  
TRAFFIC AND NOISE INCREASES TO OFF-SITE ROADWAYS**

Roadway	Location		Existing ADT	Existing + Project ADT	Change in Noise from Existing to Existing + Project	Existing + Cumulative ADT	Existing + Cumulative + Project ADT	Change in Noise from Existing + Cumulative to Existing + Cumulative + Project	Year 2030 ADT	Year 2030 + Project ADT	Change in Noise From Year 2030 to Year 2030 + Project
	Between	And									
I-15	South of SR-76		120,000	122,261	0.1	144,343	145,252	0.0	230,091	231,000	0.0
	SR-76	Mission Road	127,000	127,904	0.0	134,408	134,560	0.0	250,849	251,000	0.0
	North of Mission Road		136,000	138,261	0.1	147,214	148,350	0.0	273,864	275,000	0.0
SR-76	South Mission Road	Via Monserate	22,025	19,722	0.2	43,970	44,500	0.1	47,470	48,000	0.0
	Via Monserate	Gird Road	20,957	22,816	0.2	43,770	44,300	0.1	45,470	46,000	0.1
	Gird Road	Sage Road	20,817	21,748	0.2	36,170	36,700	0.1	41,470	42,000	0.1
	Sage Road	Old Highway 395	24,579	21,608	0.2	38,570	39,100	0.1	42,470	43,000	0.1
	Old Highway 395	I-15 Southbound Ramps	17,274	24,805	0.0	39,349	39,500	0.0	40,849	41,000	0.0
	I-15 Southbound Ramps	I-15 Northbound Ramps	9,569	19,196	0.5	32,918	33,600	0.1	32,918	33,600	0.1
	I-15 Northbound Ramps	Pankey Road	9,439	12,960	1.3	31,288	32,500	0.2	31,288	32,500	0.2
	Pankey Road	Horse Ranch Creek Road	9,439	12,491	1.2	28,104	30,300	0.3	29,804	32,000	0.3
Old Highway 395	East Mission Road	Reche Road	5,155	6,738	1.2	18,764	19,900	0.3	18,764	19,900	0.3
	Reche Road	Stewart Canyon Road	5,646	7,681	1.3	21,861	23,300	0.3	21,861	23,300	0.3
	Stewart Canyon Road	Tecalote Lane	6,405	6,518	0.1	17,524	17,600	0.0	17,924	18,000	0.0
	Tecalote Lane	Pala Mesa Drive	6,603	6,716	0.1	19,324	19,400	0.0	19,324	19,400	0.0
	Pala Mesa Drive	SR-76	8,302	9,093	0.4	20,370	20,900	0.1	20,370	20,900	0.1
Pankey Road	Street 'R'	SR-76	0	565	N/A	8,244	8,622	0.2	8,521	8,900	0.2
	SR-76	Dulin Road	936	1,162	0.9	10,538	11,902	0.5	18,637	20,000	0.3
Horse Ranch Creek Road	Stewart Canyon Road	Baltimore Oriole									
			40	2,188	N/A	5,745	7,260	1.0	6,385	7,900	0.9
	Baltimore Oriole	Longspur Road	0	2,322	N/A	9,052	11,119	0.9	9,333	11,400	0.9
	Longspur Road	Harvest Glen Lane	0	2,577	N/A	13,363	16,140	0.8	13,223	16,000	0.8
	Harvest Glen Lane	Pardee South Loop	0	3,834	N/A	16,955	20,995	0.9	16,760	20,800	0.9
	Pardee South Loop	Park/School	0	5,681	N/A	16,824	21,770	1.1	17,654	22,600	1.1
	Park/School	Street R	0	5,794	N/A	16,972	21,918	1.1	17,854	22,800	1.1
	Street R	SR-76	0	3,617	N/A	9,968	12,544	1.0	11,025	13,600	0.9
Pala Mesa Road	I-15	Street R	0	1,244	N/A	6,178	7,011	0.5	6,667	7,500	0.5
Pankey Place	Pala Mesa Drive	Horse Ranch Creek Road	0	1,809	N/A	8,398	10,367	0.9	8,331	10,300	0.9

N/A = Not Applicable; roadway segment added or removed.

### **3.6 Hazards and Hazardous Materials**

This section presents a summary of a Phase I and Limited Phase II Environmental Site Assessment (ESA) dated July 2002 and updated in October 2007. The report can be found in its entirety in this EIR as Appendix K-1. Fire hazards are also analyzed due to the potential for wildland fires at the Project Site. The FPP can be found in its entirety as Appendix K-2.

#### **3.6.1 Existing Conditions**

##### ***On-site Use of Hazardous Materials***

The Project Site currently supports citrus and avocado orchards that have been in production since at least 1928. Investigation of the Project Site indicated that the south-southwestern portion appears to be used for storage of tractor transmissions, parts, and other agricultural equipment. The western-northwestern portion of the Project Site is used for the storage of pesticides, nutrients, and insecticides.

Single-family residential dwellings with associated garages or sheds are located at various locations throughout the Project Site. A metal hanger/shed with associated metal enclosures is located on the south-southwestern portion of the Project Site. The metal hanger/shed also serves as the ranch office. There is a single-story office/storage shed near the pesticide storage area. Two wind machines occupy the central portion of the Project Site.

A total of 104 subsurface samples were collected and analyzed during the ESA. The results of the sampling found a low potential for hazards on the Project Site from current or historical agricultural operations.

##### ***Hazardous Materials Databases***

A search of available federal, state, and local regulatory and municipal environmental records was conducted as part of the ESA and is included within Appendix K-1 of this report.

The database search found the Project Site to be identified on the San Diego County Permits Database. Two off-site potential hazardous material sites were also identified within a maximum one and one-half mile radius of the property.

##### ***Wildfire Hazards***

The Project Site is adjacent to the service boundaries of the NCFPD, and within the District's SOI (see Figure 3.6-1). The Project Site is considered to be within a Hazardous Fire Area which is defined as any geographic area mapped by the State or local jurisdiction as a high, or very high hazard area, or as set forth by the Fire Agency Having Jurisdiction (FAHJ) that contains the type and condition of vegetation, topography, weather, and structure density to potentially increase the possibility of vegetation conflagration fires.



### ***Dam Inundation***

Many dams have been built in the San Diego area for the purpose of water conservation and storage. The County's Multi-Jurisdictional Hazard Mitigation Plan identifies dam failure risk levels based on dam inundation map data. A dam is considered high hazard if it stores more than 1,000 acre-feet of water, is higher than 150 feet tall, has potential for downstream property damage, and potential for downstream evacuation. Most of the County's dams are greater than 50 years old and are characterized by increased hazard potential due to downstream development and increased risk from structural deterioration and inadequate spillway capacity.

Emergency plans for dam evacuation are necessary to plan for the loss of life, damage to property, displacement of people, and other ensuing hazards that can occur from dam failure. In the event of dam failure, damage control and disaster relief would be required and mass evacuation of the inundation areas would be essential to save lives. Dam evacuation plans are maintained by the County Office of Emergency Services (OES). These plans contain information concerning the physical situation, affected jurisdictions, evacuation routes, unique institutions, and event responses. In addition, the plans include inundation maps showing direction of flow; inundation area boundaries; hospitals, schools, multipurpose staging areas; command posts/sites; and mass care and shelter facilities/sites. Unique institutions as defined by the OES include facilities such as hospitals, schools, and retirement homes.

The Henshaw Dam is a hydraulic dam that was constructed in 1923 and has a maximum capacity of 51,774 acre/feet. The dam is located in north-central San Diego County approximately 25 miles to the east of the Project Site. The dam inundation zone relative to the Proposed Project boundaries is shown in Figure 3.6-2.

### ***Emergency Air Support***

Helicopters and small planes are used in a variety of emergency response actions such as search and rescue operations and retrieving water to extinguish wildfires. The California Department of Forestry and Fire Protection (CDF) and the County of San Diego Sheriff's Department Aerial Support Detail, Air Support To Regional Enforcement Agencies (ASTREA) base carry out emergency response actions. CDF firefighters are responsible to provide comprehensive fire protection and other related emergency services, including protection of life and property. The San Diego County Sheriff's ASTREA base operates aircraft throughout San Diego County on a daily basis. These aircraft are involved in law enforcement, search and rescue, and fire related missions.

Certain tall structures can physically interfere with the implementation of an emergency response if the height of the structure or tower interferes with the ability of emergency air support services to carry out missions associated with an emergency response. Emergency and fire air support services tend to fly low to the ground for law enforcement activities, to carry out search and rescue missions, to collect water for firefighting, and to evacuate victims in remote areas. Emergency response aircraft require sufficient ground clearance to safely and efficiently function during an emergency response.

***Schools***

A school site is proposed within Planning Area 2, located along Horse Ranch Creek Road approximately one-half mile north of SR-76. Prior to the siting of a school, the local education agency is required to consult with local officials to identify facilities within one quarter mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes. Where such facilities are present within one-quarter mile of a proposed school site, the local education agency is required to make a finding either that no such facilities were identified; or that they do exist, but the health risks do not or will not constitute an actual or potential endangerment of public health at the site or that corrective measures will be taken that will result in emissions mitigation to levels that will not constitute endangerment.

***Vectors***

A vector is any insect, arthropod, rodent, or other animal of public health significance that can cause human discomfort, injury or is capable of harboring or transmitting disease. Disease causing microorganisms can be carried by a "vector," such as a flea, tick, or mosquito that transfers the disease agent from its source in nature to a human host. In the County of San Diego, the most significant vector populations include mosquitoes, rodents, flies, and fleas.

Vector sources occur where site conditions provide habitat suitable for breeding. Within a new development such as the Proposed Project, a standard requirement is the incorporation of measures, or BMPs, to reduce stormwater flow rates, allow stormwater to infiltrate back into the ground, and to reduce constituent concentrations in runoff. However, BMPs used to manage runoff often provide aquatic habitats suitable for mosquitoes and other vector species as an unintended consequence of their implementation.

***Existing Regulations*****California Health and Safety Code**

The California Health and Safety Code (H&SC) provides regulations relating to the handling, generation and storage of hazardous substances. H&SC Chapter 6.95 provides the framework for two San Diego County programs: the Hazardous Materials Business Plan (HMBP) program and the California Accidental Release Prevention (CalARP) program. Pursuant to H&SC Chapter 6.95, the HMBP and CalARP provides threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a HMBP or Risk Management Plan (RMP) is required.

Chapter 6.5 of the H&SC, the Hazardous Waste and Control Act regulates the generation, treatment, storage and disposal of hazardous waste. Hazardous Waste is any material or substance that is discarded, relinquished, disposed or burned, or for which there is no intended use or reuse, and the material or substance causes or significantly contributes to an increase in mortality or illness; or the material or substance poses a substantial present or potential hazard to human health or the environment.

Chapter 6.7 of the H&SC outlines the requirements for Underground Storage Tanks (USTs), identifies requirements for corrective actions, cleanup funds, liability, and the responsibilities of owners and operators of USTs.

#### California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs) can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. CHHSLs are concentrations of 54 hazardous chemicals in soil or soil gas that the CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA, and are contained in their report entitled Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in a million ( $10^{-6}$ ) and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA.

Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/industrial CHHSLs) at the site.

#### California Education Code

On January 1, 2000, two new laws affecting proposed school sites became effective: Assembly Bill (AB) 387 (Wildman) and Senate Bill (SB) 162 (Escutia). The bills amended the California Education Code (CEC) requiring that the Department of Toxic Substances Control be involved in the environmental review process for the proposed acquisition and/or construction of school properties that will use state funding. The intent of the regulations is to address concerns over school site properties that are or may be contaminated by hazardous materials and may pose a health threat to children and school faculty.

The CEC requires a Phase I ESA be completed prior to acquiring a school site or engaging in a construction project. Depending on the outcome of the Phase I ESA, a Preliminary Environmental Assessment and remediation may be required. Considering the strict requirements for school safety set by the CEC for school site selection, it is important that where schools already exist or are planned, that new land uses are not permitted that would represent a significant hazard to the safety of children.

#### San Diego County, Site Assessment and Mitigation Program

San Diego County's Site Assessment and Mitigation (SAM) Program, within the Land and Water Quality Division of the Department of Environmental Health (DEH), consists of project managers, field technicians, supervisors, and support staff, whose primary purpose is to protect human health, water resources, and the environment within San Diego County by providing oversight of assessments and cleanups in accordance with the California H&SC. The SAM's Voluntary Assistance Program also provides staff consultation, project oversight, and technical or environmental report evaluation and

concurrence (when appropriate) on projects pertaining to properties contaminated with hazardous substances.

#### County of San Diego, Underground Storage Tank Program

The DEH Hazard Management Department (HMD) Underground Storage Tank (UST) Program administers and enforces federal and state laws and regulations and local ordinances for the construction/installation, modification, upgrade, and removal of USTs in San Diego County. If contamination is discovered or likely to be present, owners or operators of USTs are required by law to report the contamination to the DEH HMD and SAM Programs and to take corrective action.

#### County of San Diego Fire Code

The County is unique within the state of California in having 16 fire protection districts within its boundaries. For the purposes of prescribing regulations in the unincorporated area of the County, the applicable fire code is known as the County of San Diego Fire Code, County Code of Regulatory Ordinances Title 9 Division 6 Chapter 1, which adopts and amends the California Fire Code (CCR Title 24 part 9). The County Fire Code consists of local fire protection district ordinances that have modified the Fire Code portion of County Building Code, County Code of Regulatory Ordinances Title 9 Division 1 & 2, which adopts and amends the California Building Code (CCR Title 24 part 2), and includes ignition-resistant construction requirements (Chapter 7A) for wildland fire areas. The purpose of the Code is the protection of the public health and safety, which includes permit and inspection requirements for the installation, alteration or repair of new and existing fire protection systems, and penalties for violations of the code. The Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the fire code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases.

#### County of San Diego General Plan- Public Facility Element

The Fire Protection and Emergency Services section of the Public Facility Element of the County General Plan provides a detail of the County's existing fire protection services. The Public Facility Element identifies that rapid response to emergency calls is an essential requirement to providing adequate fire and emergency services.

Objective one seeks to provide, "Sufficient fire and emergency services facilities to meet established emergency travel time objectives to minimize fire and emergency risk."



Travel times are based on category of land use as shown in Table 3.6-1 below.

**TABLE 3.6-1  
EMERGENCY SERVICES TRAVEL TIMES**

Land Use Category	Maximum Travel Time	Land Use Category Defined
Town	5 minutes	Single-family residential lots of less than two acres, or more intensive uses such as multi-family residential. Includes all industrial development and all commercial development except neighborhood commercial
Estate	10 minutes	Single-family residential lots from two to four acres in size. Includes neighborhood commercial development.
Rural	20 minutes	Large lot single-family residential and agricultural development. Lot sizes of greater than four acres.

#### Mosquito Abatement and Vector Control District Law

The intent of the Mosquito Abatement and Vector Control District Law is to create and continue a statutory authority for special districts (or Counties exercising the powers of a district through an existing department or agency) to conduct effective programs for the surveillance, prevention, abatement, and control of mosquitoes and other vectors. It encourages vector control districts to cooperate with other public agencies and to adapt the powers and procedures provided by the law to meet their own local circumstances. Sections §2060-2067 of the Mosquito Abatement and Vector Control District Law addresses the abatement of public nuisances. It grants power to a district to take the necessary steps to abate a public nuisance including the issuance of a notice to inform the owner that the nuisance exists and the steps they should take to abate the nuisance and prevent recurrence.

### **3.6.2 Guidelines for the Determination of Significance**

For the purpose of this EIR, the basis for determination of significance are the County's Guidelines for Determining Significance for Emergency Response Plans, adopted July 30, 2007 (Guidelines 1, 2, & 10); Hazardous Materials and Existing Contamination; adopted July 30, 2007 (Guidelines 3 through 7); Wildland Fire and Fire Protection, adopted March 19, 2007 (Guidelines 8 & 9); and Vectors, adopted July 30, 2007 (Guidelines 11 through 13).

The proposed project would result in a significant hazard impact if:

1. The project proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner:
  - a. Hospital
  - b. School
  - c. Skilled nursing facility
  - d. Retirement home
  - e. Mental health care facility

- f. Care facility with patients that have disabilities
  - g. Adult and childcare facility
  - h. Jails/detention facility
  - i. Stadium, arena, amphitheater
  - j. Any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure
- 2. The project proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and as a result, the project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.
- 3. The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC and the project will not be able to comply with applicable hazardous substance regulations.
- 4. The project is a business, operation, or facility that would handle regulated substances subject to CalARP RMP requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.
- 5. The project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been the subject of a release of hazardous substances, and as a result the project may result in a significant hazard to the public or the environment.
- 6. The project proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and as a result, the project would create a significant hazard to the public or the environment.
- 7. The project is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash); and as a result, the project would create a significant hazard to the public or the environment.
- 8. The project cannot demonstrate compliance, or offer Same Practical Effect, with applicable fire regulations, including but not limited to the California Fire Code, California Code of Regulations, County Fire Code, or the County Consolidated Fire Code.
- 9. The project is inconsistent with recommendations, including fuel modification, of a required comprehensive Fire Protection Plan.

10. The project cannot meet the emergency response objectives identified in the Public Facilities Element of the County General Plan or offer Same Practical Effect.
11. The project proposes a BMP for stormwater management or construction of a wetland, pond or other wet basin that could create sources of standing water for more than 72 hours, and as a result, could substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances.
12. The project proposes a use that involves the production, use and/or storage of manure or proposes a composting operation or facility and as a result, could substantially increase human exposure to vectors that are capable of transmitting significant public health diseases or creating nuisances.
13. The project would result in a substantial increase in the number of residents locate within one-quarter mile of a significant offsite vector breeding source; including but not limited to, standing water (e.g. agricultural ponds, reservoirs) and sources of manure generation or management activities (e.g. confined animal facilities, horse keeping operations, composting operations).

### **3.6.3 Analysis of Project Effects and Determination as to Significance**

#### ***Dam Inundation (Guideline 1)***

A significant impact would occur if the project proposed one of ten specified unique institutions in a dam inundation zone. Unique institutions located or proposed in dam inundation zones could result in a significant loss of life due to the size and nature of the uses and the difficulty with evacuating people in the event of a dam failure. Unique institutions, as defined in the County of San Diego Guidelines for Determining Significance for Emergency Plans, include the following types of facilities: hospital, school, skilled nursing facility, retirement home, mental health care facility, care facility with patients that have disabilities, adult and childcare facility, jails/detention facility, and stadium/arena/amphitheater. The inability to efficiently evacuate unique institutions could cause a significant loss of life.

The Proposed Project includes the construction of a school within Planning Area 2. As shown in Figure 3.6-2, the proposed school site is located outside of the dam inundation zone. Therefore, impacts related to significant losses associated with the inability to efficiently evacuate the school would be **less than significant**.

#### ***Emergency Air Support (Guideline 2)***

A significant impact would occur if the project included a structure or tower 100 feet or greater in height, and as a result cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

The Proposed Project's Community Design Guidelines include a 35-foot height limitation on all structures. Because no structure or tower 100 feet or greater in height would be permitted to be built, there would be no interference with emergency response missions

utilizing low flying air craft. Therefore, impacts to emergency air support would be **less than significant**.

***Hazardous Substance Use (Guideline 3)***

A significant impact would occur if the project is a business, operation or facility that proposes to handle, generate, and/or store hazardous substances regulated by Chapters 6.95, 6.5 and 6.7 of the California H&SC. The California H&SC §25501(o) defines hazardous materials as any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or future hazard to human health and safety or to the environment, if released into the workplace or the environment.

Implementation of the Proposed Project would create residential and associated land uses. The Proposed Project does not include the handling of hazardous substances as part of a business subject to the aforementioned regulations. Specifically, the proposed land uses would not result in transport, emission, or disposal of hazardous materials in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC. Therefore, impacts from hazardous materials use would be **less than significant**.

***Hazardous Substances Within One-Quarter Mile of a School/Day Care Facility (Guideline 4)***

A significant impact would occur if the project is a business, operation, or facility that would handle regulated substances subject to CalARP RMP that in the event of a release could adversely affect children's health due to the presence of a school within one-quarter mile of the facility.

The Proposed Project does not include any potential for facilities that handle regulated substances to represent a significant hazard to children when located within one-quarter mile of a school or day care. Regulated substances are chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable or explosive. Regulated substances are subject to CalARP RMP requirements when handled at threshold levels identified in the CCR. The specific threshold levels are not relevant because no regulated substances will be handled as a result of implementation of the Proposed Project.

The adjacent Campus Park development includes a proposal for commercial uses which are unknown at this time. Although the Proposed Project does include the possible development of a school, impacts resulting from the handling of a regulated substance within the Campus Park site would be **less than significant** because these uses would all be located greater than one-quarter mile from the proposed school site. Additionally, the proposed on-site WWTP is located greater than ¼ mile from the potential school site. Therefore, impacts associated with the proximity of the school to the WWTP would be **less than significant**.



***Hazardous Materials Site/ Site Subject to Release of Hazardous Substance  
(Guidelines 5)***

A significant impact would occur if the Proposed Project would be located on or within one-quarter mile of a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been subject to a release of hazardous substances and, as a result, would create a significant hazard to the public or the environment.

*Hazardous Materials Site*

The Project Site is neither on nor within one-quarter mile of a listed hazardous materials site. Therefore, **no impact** is associated with the hazardous materials site list.

*Site Subject to Release of Hazardous Substance*

*Historical Agricultural Use*

A Phase I and limited Phase II ESA was performed on the Project Site in 2007. The study found that the property has been used for agricultural purposes (primarily citrus and avocado) since at least 1928. Agricultural activities include the application of fertilizers, herbicides, and pesticides. As such, most of the recognized environmental conditions investigated (Figure 3.6-3) are associated with this past agricultural use.

In general, soils contaminated by past agricultural activities are a concern, because of land use changes involving the construction of housing developments on former agricultural lands. Investigation of suspected pesticide contamination on properties proposed for residential development typically includes soil sampling in areas where materials were stored, handled, and mixed in addition to identifying the historical crops grown, pesticides applied, and the methods of application. The investigation and any remedial actions related to pesticide contamination focuses on the elimination of human or environmental exposure.

Although concentrations of pesticides in soil may exceed the Title 22 levels for a hazardous waste, legally applied pesticides, and the resulting residues in soil, are not regulated as hazardous waste unless transported off the subject property (H&SC Section 25117). Constituents of concern at former agricultural sites include organochlorine pesticides and metals which may pose a human health risk. The Phase I and limited Phase II ESA performed on the Project Site evaluated agricultural chemical residues on-site against Preliminary Remediation Goals (PRG) or CHHSLs. The evaluation resulted in a finding that impacts would not be significant; however, there are two irrigation ponds on-site that were not sampled. The possibility that the ponds could contain significant levels of chemical residues represents a potentially **significant impact (HZ-1)**.

Smudge pots are oil-burning devices used to prevent frost on fruit trees. Smudge pots are placed between trees in an orchard, allowing the heat and smoke from the burning oil to prevent the accumulation of frost on the fruit of the grove. Smudge pots were commonly used for several decades in California citrus groves. Smudge pots were observed at several locations within groves on the Project Site. Staining and hydrocarbon odors were detected within the vicinity of several of the smudge pot

locations and the surficial soil in the immediate vicinity of the smudge pots appears to have been impacted by total petroleum hydrocarbons (TPH). Exposure to TPH compounds can result in central nervous system damage, disrupt immune system functions or cause cancer. Therefore, the existence of TPH on-site represents a potentially **significant impact (HZ-2)**.

#### *Historical Construction Materials*

Historic records indicate that the residential properties located on-site were constructed between the early 1970s and mid-1980s. Additionally, several large construction debris piles are located within the Project Site. Redevelopment or demolition of these residential buildings or removal of the debris piles could result in the potential release of hazardous substances such as asbestos or lead-based paint. Potential exposure to these contaminants represents a potentially **significant impact (HZ-3)**.

#### *Existing/Proposed Agricultural Use*

The agricultural operations on the Project Site store and use pesticides, miticides, and bioxides. These chemicals are stored in aboveground storage tanks (ASTs) and plastic containers located in the central portion of the Project Site. Although concentration levels of these chemicals is well below the PRG and Soluble Threshold Limits Concentrations (STLC), all ASTs would have to be removed and disposed according to applicable regulations prior to development. Therefore, impacts associated with the storage of pesticides would be **less than significant**.

Additionally, pesticides are applied to the existing avocado groves by helicopter spraying. Upon implementation of the Proposed Project, the agricultural acreage would be limited to the 49.3 acres of groves that are proposed to remain within agricultural open space. This limited acreage would not be sprayed by helicopter. Pesticide use associated with the on-site agricultural lot would occur in accordance with existing regulations and applicable requirements of the Department of Agriculture Weights and Measures (AWM). The HOA will ensure all applicable pesticide use permits are obtained from the AWM and that applicable permit conditions are complied with for pesticide use on the commonly owned lot. Therefore, compliance with applicable pesticide use regulation would ensure that impacts to residents would be **less than significant**.

The existing residential buildings located on-site utilize septic tank systems. Additionally, there is a historic water well located on-site, but the location is currently unknown. The Proposed Project includes the abandonment and removal of all on-site septic systems, as well as the locating and removal of the historic water well in accordance with all applicable regulations and under permit and approval from the County of San Diego Department of Health. Therefore impacts associated with the on-site septic systems and the historic well are **less than significant**.

#### ***Hazardous Site Location (Guidelines 6 and 7)***

A significant impact would occur if the project proposed structures for human occupancy and/or significant linear excavation within 1,000 feet of a landfill, or if the Project Site is located on or within 250 feet of the boundary of a parcel identified as containing burn ash and, as a result, would create a significant hazard to the public or the environment.

The Project site is not located within 1,000 feet of a landfill (Guideline 6) or within 250 feet of a burn site (Guideline 7). Impacts associated with such hazards are **less than significant**.

***Fire Hazard (Guidelines 8 and 9)***

A significant impact would occur if the project could not demonstrate compliance, or offer Same Practical Effect, with applicable fire regulations, or is inconsistent with recommendations, including fuel modification, of a required comprehensive Fire Protection Plan.

The Project Site is adjacent to the service boundaries of the NCFPD, and within the District's SOI. Thus, project implementation will require annexation into the NCFPD.

The Project Site is located within a declared High Fire Hazard Severity Zone. This classification is due to the type of vegetation, fire history and rough topography in the area. Specifically, the general area of the Project Site is known to have an active wildland fire history; there have been more than 10 large wildland fires burning more than 100 acres during the past 50 years. Local weather conditions such as wind speed and live and dead fuel moistures are a key ingredient to fire intensity and rate of spread. The most critical wind pattern to the Project Site is an off-shore wind coming out of the north/northeast, typically referred to as a Santa Ana wind. Due to this weather pattern, historical fires in the area have burned rapidly during hot, dry, and windy weather, and the majority of these occurred to the north and west of the Project Site (Figure 3.6-4). In order to further assess wildland fire hazards and risks associated with the Proposed Project, a FPP for the Proposed Project was prepared by Firewise 2000, Inc. and is included in its entirety in Appendix K-2.

The Proposed Project includes native vegetation comprised of both coastal sage scrub and chaparral to remain on-site within open space located along the northern and eastern perimeter of the Project Site. Additionally, 49.3 acres of avocado and citrus groves will be retained in locations primarily adjacent to the natural open space. Residential planning areas are proposed adjacent to both the agricultural and natural open space areas. The vegetation both on-site and surrounding the entire Project Site therefore can be a threat to carry a fast rate-of-spread and moderate to very high intensity wildland fire from the north or east.

A Fire Fuel Assessment, or fire model, is included in the FPP. This evaluation utilized the BEHAVE PLUS 3.0.1 Fire Modeling System to provide a worst-case scenario wildland fire event based on site topography, fuel loads, weather conditions and maximum heat production. The results of the model, coupled with the expertise of the modeler, were used to identify minimum fuel modification and brush clearing distances to assure relatively safe building sites.

Different fuel models were used for different areas within the Project Site. Each assessment considered the type of fuel, topography and exposure to prevailing winds:

- Northern Boundary: Due to the development areas abutting both natural and orchard vegetation proposed to remain within the northern project boundaries,

the fire model analyzed this area as Fuel Model 18 (70% coastal sage/buckwheat) and Fuel Model 6 (30% intermediate chaparral with brush up to six feet in height). A fire burning in this “Combined Fuel Model 18/6” can be expected to expose adjacent structures to one to three minutes of significant radiant and convective heat. This fuel model also considered the location of the Project Site, on the west side of Monserate Mountain where it would be exposed to strong north or northeast Santa Ana winds up to 60 mph, as well as the moderately steep slopes of 25 to 50 percent. Although the slopes are downhill, generally advantageous to reduce fire hazard potential, the model identified potential flame length of 43.8 feet.

- Eastern Boundary: Natural and orchard fuels are to remain along the entire eastern boundary of the Project Site. The primary area of concern is the homes proposed to be located on the eastern perimeter of the remaining vegetation. This area was analyzed using Fuel Model 18 with projections of an extreme Santa Ana wind of 60 mph on downhill slopes of 55 percent. The model identified potential flame length of 42.1 feet.
- Southern Boundary: The service road for the WWTP is proposed along nearly all the southern edge of the Project Site. This area was analyzed using Fuel Model 18, considering a near level slope in alignment with a west or southwest wind pattern. This assessment included both a “rare event” 30 mph wind and “typical summer day” wind of 10 mph. The model identified potential flame length of 33.8 feet and 19.6 feet, respectively.
- Western Boundary: Vegetative fuels along the western boundary of the Project Site are lighter than those found on the other boundaries due to frequent disturbances and identified for fuel modeling purposes as intermediate grass of two feet in height, Fuel Model 2. The vegetation so located on nearly level to slightly sloping topography of three to 15 percent. The greatest weather concern in this area is a “rare event” 30 mph wind. The model identified potential flame length of 19.0 feet. This assessment also considered the potential of a fire burning west of the western boundary resulting in the potential of a crown fire developing in the riparian vegetation especially in areas with high accumulations of dead material located in the tree canopy. Such a fire could produce flame lengths of 29.2 feet.

As a result of the findings of the fire modeling, project design features were incorporated into the Proposed Project including the creation of fuel modification zones, guidelines relating to the use of ignition resistant building materials, road requirements, placement and flow of fire hydrants, and the provision of emergency access.

**Fuel Modification Zones:** Due to potential flame lengths, the FPP recommends fuel modification zones totaling 100 feet to assure adequate fire protection of all structures. Specifically, “Zone A” is comprised of the first 50 feet around structures and provides defensible space for fire suppression forces to protect those structures from radiant and convective heat. It is an irrigated zone, free of all combustible construction, firewood,



propane tanks, fuel, and flammable native and ornamental vegetation. “Zone B” is an additional 50 feet beginning at the outer edge of “Zone A.” To establish the required fuel modification to the west of the proposed multi-family units in PA1, the applicant will obtain a permanent easement for fuel management of the adjacent property.

Figure 3.6-5 shows the Conceptual Fire Protection Plan Map which includes the location of the fuel modification zones. Acceptable plantings and required landscaping and maintenance for both Zone A and Zone B are detailed in the FPP. Additionally, the Proposed Project’s Homeowners Association will be responsible to ensure that brush clearance regulations are maintained.

**Ignition Resistant Building Materials:** The County Fire and Building Codes provide a two tiered approach for the requirement that all new construction use ignition resistive building materials. Basic ignition resistive construction materials are required for all new construction. Enhanced ignition resistive materials are required for structures subject to one or more of the following special hazards or conditions: high fuel loads, steep topographic conditions, less than 100 feet of fuel modification, or areas identified as “high to very high fire hazard areas.”

**Road Requirements:** All on-site roads will be subject to applicable road standards relating to width, grade and surface type as provided in County Fire Code sections 902.2.2.1, 902.2.2.6, and 902.2.2.2, respectively. The FPP specifically requires that no road within the development shall exceed 20 percent grade, with a minimum width of 24 feet within the multi-family portion of the development. All cul-de-sacs of greater than 150 feet in length shall be provided with a minimum 42 foot AC radius turnaround. The FPP additionally concludes that roadside fire clearing is required within 30 feet of the roadway edge for new roads and within 20 feet of the roadway edge for existing roads. Figure 3.6-5 details the areas of the Proposed Project requiring roadside fire clearing.

**Fire Hydrants:** The FPP identifies the need for a minimum of 40 residential type fire hydrants having a flow capacity of supplying 1,500 GPM at 20 pounds residual pressure with not less than 2,500 GPM available in the mains. Hydrants are required to be placed at intersections, at the beginning radius of cul-de-sacs and at intervals of not less than 650 feet in single family residential areas. In multi-family areas, commercial type fire hydrants are required to be installed at intersections, at the beginning radius of cul-de-sacs and at intervals of not less than 300 feet of fire access roadways.

**Emergency Access:** Emergency access is required to assure a reliable means of egress for residents during a fire event that is safe and separate from the primary access. Fire access for the Proposed Project will be provided via a northeasterly extension of Street “E” to Rice Canyon Road. This fire access will meet emergency access requirements.

The FPP provides direction for assuring that a community is reasonably safe from fire hazards. Based on the fire modeling and commentary included in the FPP, project design measures have been included in the Proposed Project relating to fuel modification zones, use of ignition resistant building materials, road requirements, fire hydrants, and the provision of fire access. As a result of these project design measures hazards associated with wildfires will be **less than significant**.

***Emergency Response (Guideline 10)***

A significant impact would occur if the project could not meet emergency response objectives identified in the Public Facility Element of the County General Plan or offer Same Practical Effect. Projects must comply with the emergency travel time requirements specified in the Public Facility Element of the General Plan. Travel time is defined as the estimated time it will take for a responding agency to reach the furthest structure in a proposed development project. Travel time is determined by measuring the most direct reliable route with consideration given to safe operating speeds for heavy fire apparatus.

Pursuant to the land use category definitions in the Public Facility Element, the Proposed Project would be considered a “town” and subject to a five minute maximum travel time for emergency response.

The FPP prepared for the Proposed Project addresses fire department response times. The study concludes that residents of the Proposed Project will be within a three to five minute initial response time for NCFPD Station #4 located at 4375 Pala Mesa Drive (Figure 3.6-1). Therefore, the Proposed Project will meet emergency response objectives identified in the Public Facility Element and impacts associated with emergency response time will be **less than significant**.

***Vectors (Guidelines 11 through 13)***

A significant impact would occur if the project would substantially increase human exposure to vectors capable of spreading disease by proposing a vector breeding source, including but not limited to, sources of standing water for more than 72 hours (e.g., ponds, stormwater management facilities, constructed wetlands); or proposing a use that involves the production, use and/or storage of manure or a composting operation; or proposing a substantial increase in the number of residents located within one-quarter mile of an existing off-site vector breeding source.

The Proposed Project would not be within one-quarter mile of an existing off-site vector source nor would the Proposed Project involve the use, production or storage of manure. The Proposed Project does include the construction of stormwater management facilities intended to relieve potential affects of stormwater run-off including the creation of sources of standing water.

Stormwater BMPs could result in vector production through the pooling or ponding of water for time sufficient to permit the emergence of adult mosquitoes. In order to prevent such infestation, captured water must be discharged within 72 hours, existing mosquitoes must be denied access to standing water and/or the habitat made less suitable for mosquito breeding. The SWMP for the Proposed Project is included in its entirety in Appendix M-1. The SWMP provides a discussion of those BMPs required to be included in the Proposed Project’s design in order to assure the control and maintenance of stormwater run-off resulting from the construction of new impervious surfaces and redirection of on-site drainage. Specifically, the following BMPs, included in the Proposed Projects design, would preclude vector breeding: 1) all hydrodynamic separators would be designed to exclude vectors from enclosed sources of standing water in structural BMPs; and 2) all detention basins would be designed for rapid

discharge, completely draining within 24 to 72 hours in order to prevent basins from becoming sources for vectors.

The on-site WWTP could result in exposure to vectors. Standing water in excess of 72 hours is not expected within treatment facilities, however will be likely within the wet weather ponds. The primary method of vector control, specifically to prevent mosquito breeding for the wet weather ponds will be vegetative management and chemical control, as necessary. The wet weather ponds are designed to operate so that half of the ponds are filling while the other half are empty. This allows sufficient time to control and remove emergent vegetation conducive to mosquito production. As necessary, mosquito larvicides may be applied within the ponds to deter mosquito breeding. The U.S. EPA reports that, when used properly, mosquito larvicides are of no concern for human health threats and do not pose risks to wildlife or the environment.

Implementation of the Proposed Project would include the construction of stormwater BMPs and vector control measures. The stormwater system would be designed to ensure that 1) existing vectors are excluded from stormwater facilities and 2) habitat suitable for vector breeding is minimized. Vector control within the WWTP's wet weather ponds would be maintained through pond design, and application of larvicides, as needed. These design measures would ensure that impacts associated with vectors would be **less than significant**.

#### **3.6.4 Cumulative Impact Analysis**

The cumulative study area for potential impacts associated with hazards would be different based on the particular hazard.

##### **On-Site Contamination**

Impacts to residents of the Proposed Project from existing on-site hazardous materials can be mitigated to a level of less than significant with the implementation of project design features and mitigation measures **M-HZ-1, M-HZ-2, and M-HZ-3 a and b** listed in Section 3.6.5 below. Similar measures will be implemented for the other cumulative projects under consideration. Therefore, no cumulative impacts from on-site hazards would result from development of the Proposed Project.

##### **Dam Inundation**

The cumulative study area related to potential hazards from a dam inundation zone would be the area of the zone. As shown in Figure 3.6-2, the areas that lie within the dam inundation zone from the Henshaw Dam in the vicinity of the Proposed Project are primarily used for agricultural purposes with the exception of the Lake Rancho Viejo development. A portion of the Proposed Project lies within the mapped dam inundation zone; however, direct impacts were determined to be less than significant. No cumulative impacts will occur as a result of the Proposed Project.

##### **Fire Hazard**

Due to the unpredictable and damaging nature of a wildfire, the entirety of the undeveloped portions of San Diego County could be considered the cumulative impact area for fire hazard impacts. To study such an area would be unreasonable; however, the requirement for stringent fire protection plans and the implementation of regulations

throughout the county and surrounding cities assure that site specific measures are taken to address potential impacts. Generally, when a project is constructed it results in the removal of available flammable fuels for wildfire to consume and breaks up fuel continuity. This effectively gives fire suppression resources an opportunity to contain and control a wildfire. The Proposed Project has prepared an FPP that addresses the project's specific risk for wildfire impacts. The FPP reduces wildfire impacts through design measures, landscaping standards, and operational procedures. Additionally, the Proposed Project is required to adhere to Fire Code standards of construction and land development. Based on approval of the FPP, associated landscaping plans, and fuel modification zones, implementation of the Proposed Project would not contribute to any significant cumulative impacts related to wildfires.

### **Vectors**

As stated in Section 3.6.3 above; on-site vector control would be accomplished through design measures that ensure rapid drainage on-site and the removal of opportunities for vector breeding (e.g., standing water). The SWMP for the project includes BMPs which ensure that there would be no significant impacts associated with vectors. Additionally, should it be required, pest control within the agricultural groves that are to be preserved on-site would be conducted at the direction of the HOA. Therefore, implementation of the Proposed Project would not contribute to any significant cumulative impacts related to vector infestation.

### **3.6.5 Mitigation Measures Proposed to Minimize the Significant Effects**

- M-HZ-1** Prior to grading, irrigation water shall be removed from the two on-site irrigation ponds and soil samples from the bottom of the ponds shall be collected and analyzed for potential agricultural residues, to the satisfaction of the Director of DEH. If contamination is present, provide evidence to the satisfaction of the Director of DEH that all contaminated soils from the irrigation ponds have been remediated under the oversight of the DEH's SAM Program or removed and properly disposed of at an appropriately permitted facility, in accordance with government agency regulations.
- M-HZ-2** Prior to grading, surficial soil in the vicinity of the smudge pots and elsewhere on the property where minor surficial staining is evident shall be excavated, removed from the site, and properly disposed of at an appropriately permitted facility, in accordance with government agency regulations.
- M-HZ-3a** Prior to issuance of a building permit that includes demolition of on-site structures and prior to commencement of demolition or renovation activities, a facility survey shall be performed to determine the presence or absence of ACMs located in the buildings to be demolished. Suspect materials that will be disturbed by the demolition or renovation activities shall be sampled and analyzed for asbestos content, or assumed to be asbestos containing. The survey shall be conducted by a person certified by Cal/OSHA pursuant to regulations implementing subdivision (b) of Section 9021.5 of the Labor Code, and shall have taken and passed an EPA-approved Building Inspector Course. Should regulated asbestos containing materials be found, it shall be handled in compliance with the San Diego County Air Pollution Control District Rule 361.145 – Standard for Demolition and Renovation. Evidence of completion of the facility survey shall consist of a signed, stamped statement



from the person certified to complete the facility survey indicating that the survey has been completed and that either regulated asbestos is present or absent. If present, the letter shall describe the procedures that will be taken to remediate the hazard.

**M-HZ-3b** Prior to issuance of a building permit that includes demolition of on-site structures and prior to commencement of demolition or renovation activities, a survey shall be performed by a California Department of Health Services (DHS) certified lead inspector/risk assessor to determine the presence or absence of lead based paint (LBP) located structures to be demolished. All lead containing materials scheduled for demolition must comply with applicable regulations for demolition methods and dust suppression. Lead containing materials shall be managed in accordance with applicable regulations including, at a minimum, the hazardous waste disposal requirements (Title 22 California Code of Regulations [CCR] Division 4.5), the worker health and safety requirements (Title 8 California Code of Regulations Section 1532.1), and the State Lead Accreditation, Certification, and Work Practice Requirements (Title 17 CCR Division 1, Chapter 8).

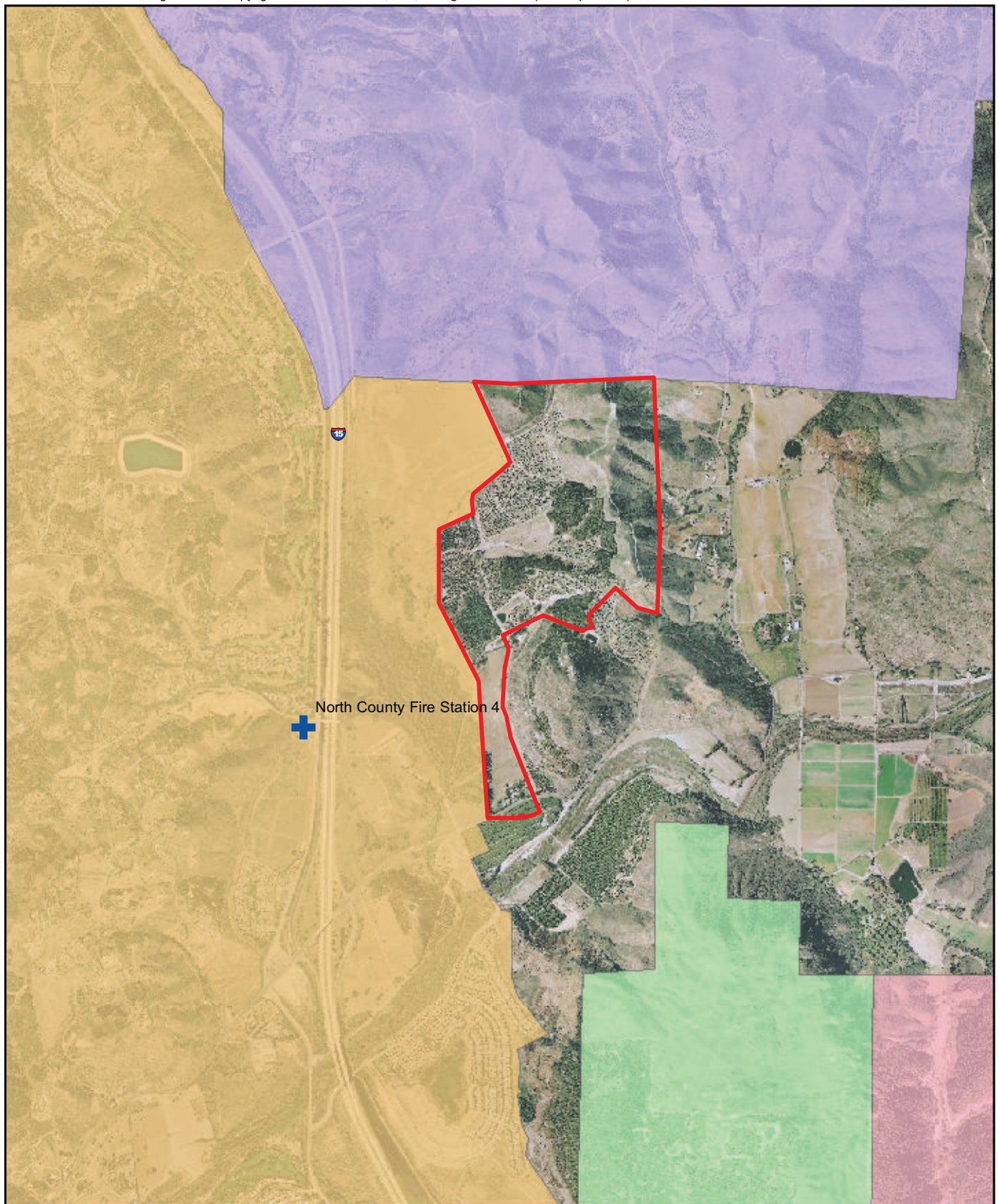
### **3.6.6 Conclusion**

There are two irrigation ponds located on the Project Site. The potential for chemical residue within these ponds represents a potentially significant impact (HZ-1). Mitigation measure M-HZ-1 requires the analysis of soil samples from within the ponds to determine whether they have been contaminated. Depending on the results of the testing, remediation and disposal action shall be taken under the oversight and direction of DEH. Implementation of this measure assures the detection and remediation of potentially harmful contaminants within the ponds. This measure reduces potentially significant impacts associated with the irrigation ponds to a level that is less than significant.

The existence of several contaminated smudge pots observed on the Project Site represents a potentially significant impact (HZ-2). Mitigation measure M-HZ-2 requires the excavation, removal and disposal of soils within the vicinity of the smudge pots. This action will be done in accordance with all applicable government agency permitting and regulations. Implementation of this measure assures the removal of potentially harmful contaminants within the Project Site. This measure reduces potentially significant impacts associated with the smudge pots to a level that is less than significant.

Demolition of existing structures on the Project Site could result in the release of asbestos and/or lead (HZ-3). Mitigation measures M-HZ-3a and M-HZ-3b provides that prior to demotion and/or renovation measures are taken in accordance with all appropriate regulations to assure protection against the release of asbestos and/or lead. These measures reduce potentially significant impacts associated contaminations to a level that is less than significant.

Incorporating mitigation measures M-HZ-1 through M-HZ-3b and design considerations that are listed in Table 1-5 would reduce impacts resulting from the implementation of the Proposed Project to a level that is less than significant.



Project Boundary

+ Fire Station

**Fire Protection Districts**

- DEER SPRINGS FPD
- NORTH COUNTY FPD
- NORTH COUNTY FPD - RAINBOW SUBZONE
- VALLEY CENTER FPD

0      Feet      2,500



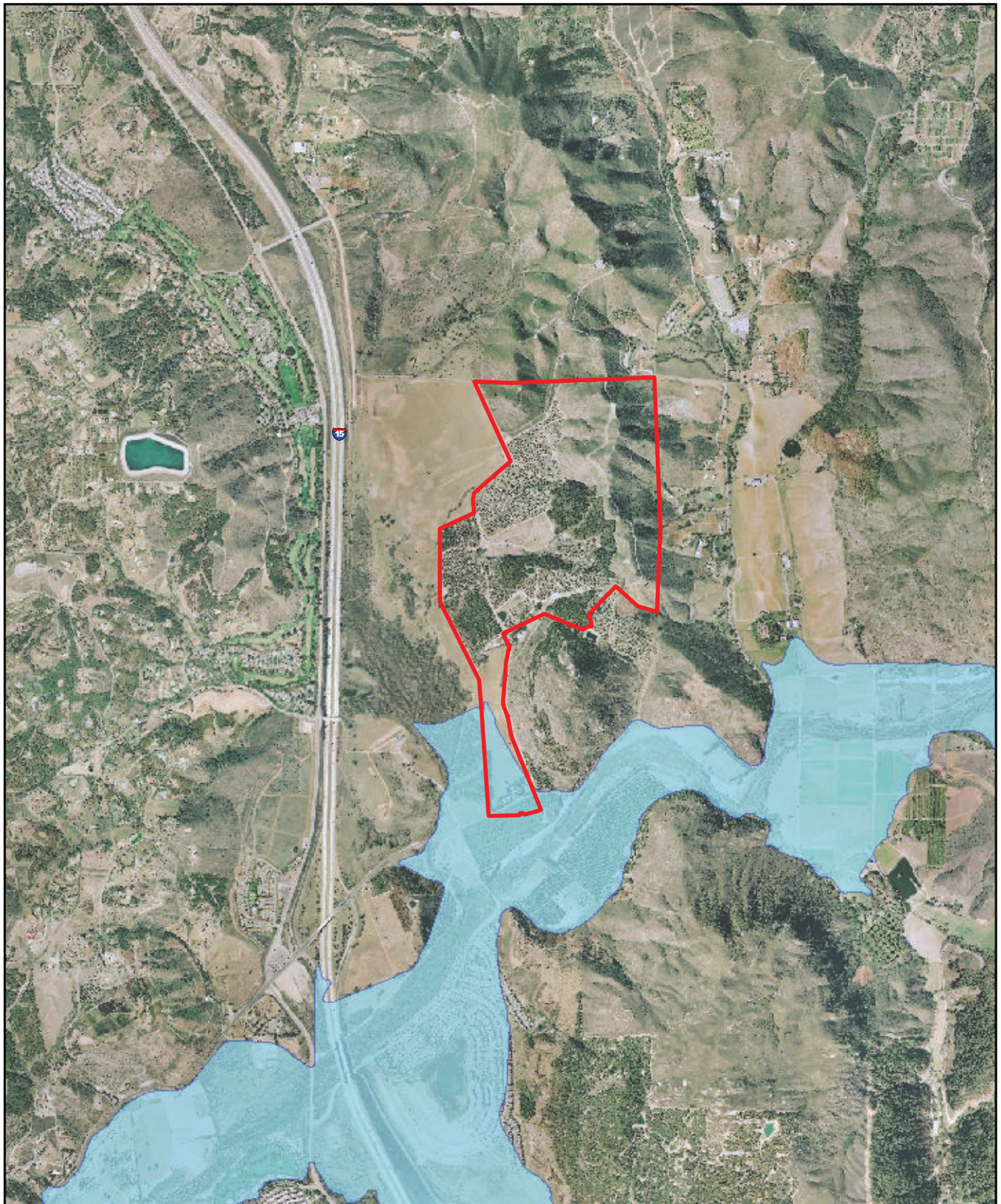
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
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**FIGURE 3.6-1**

Fire Protection Districts





 Project Boundary  
 Dam Inundation Zone

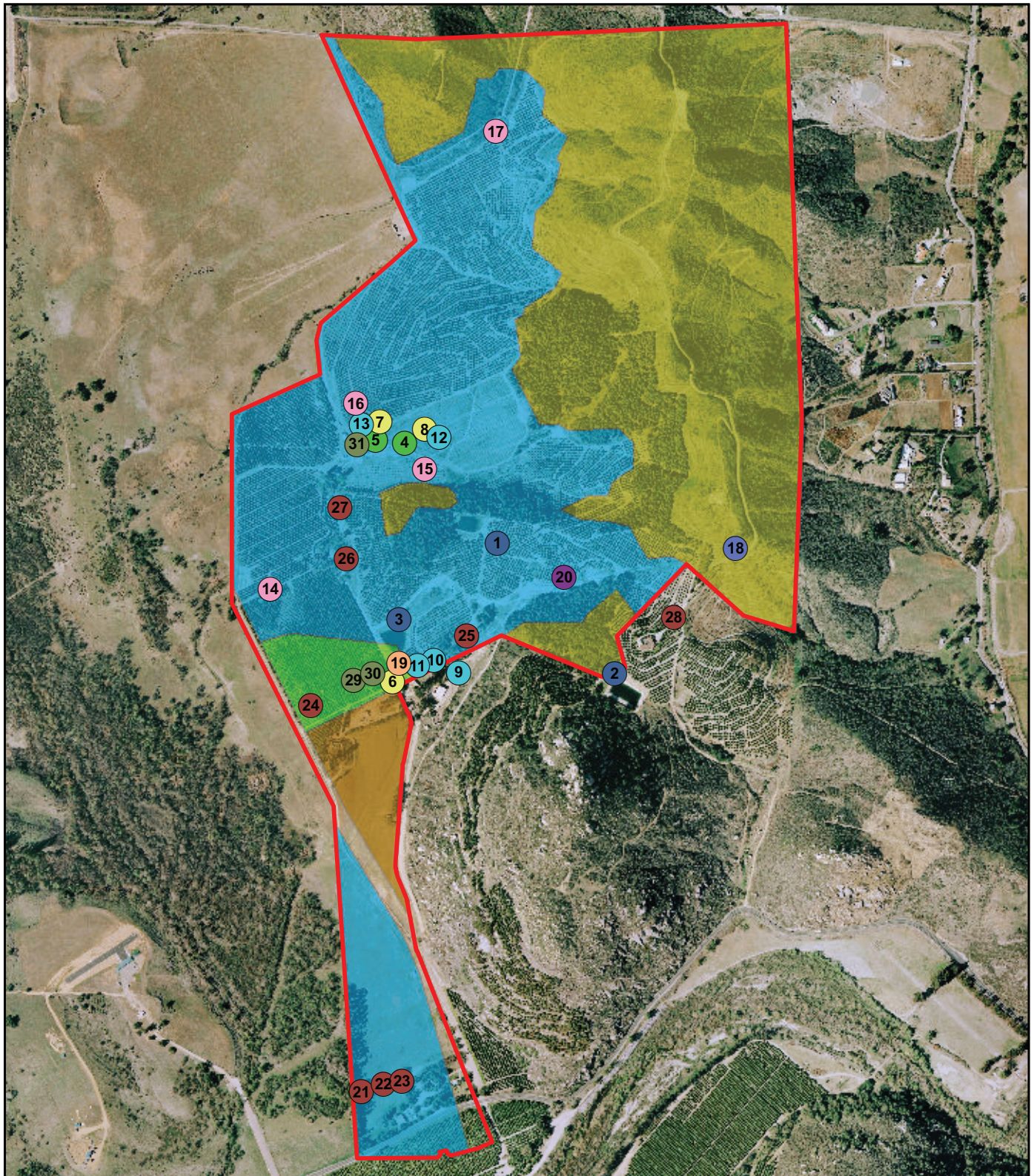
 0 Feet 2,500 

RECON

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FIGURE 3.6-2  
Dam Inundation Zone





 Project Boundary

**Proposed Land Use**

 Residential


 School

 Park

 Open Space

 Irrigation Pond 1-3

 Chemical Storage Area 4-5


 Drums 6-8

 Diesel / Gas AST 9-13


 High / Low Heaters 14-17

 Water AST 18

 Debris Pile 19

 Construction Debris 20

 Dwelling (ASB & Lead) 21-28

 Storage Shed 29-31

 0 Feet 1,000



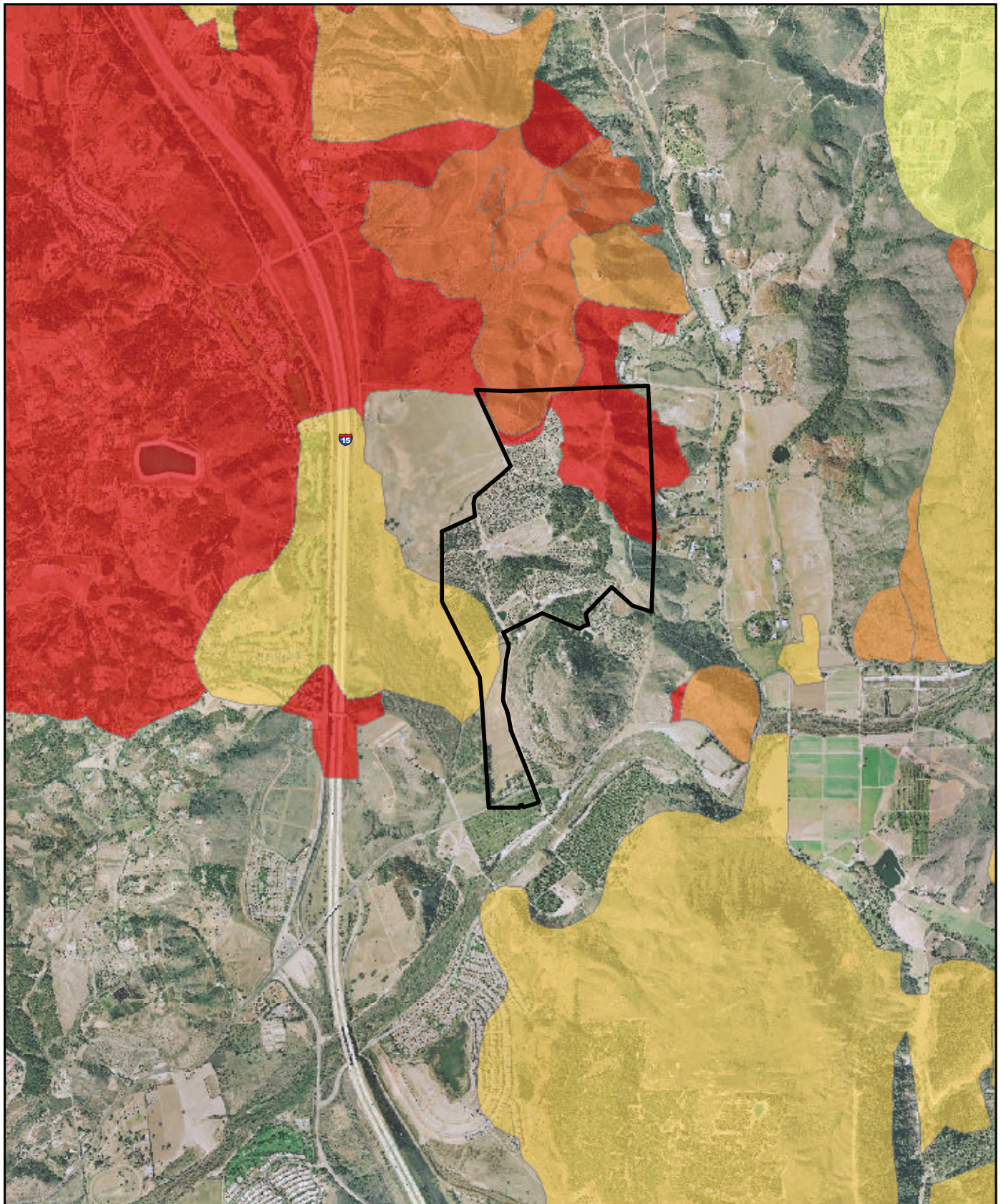
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FIGURE 3.6-3

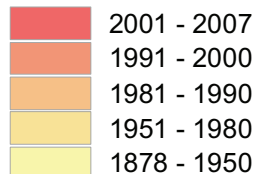
Recognized Environmental  
Conditions (REC)





Project Boundary

**Fire History**

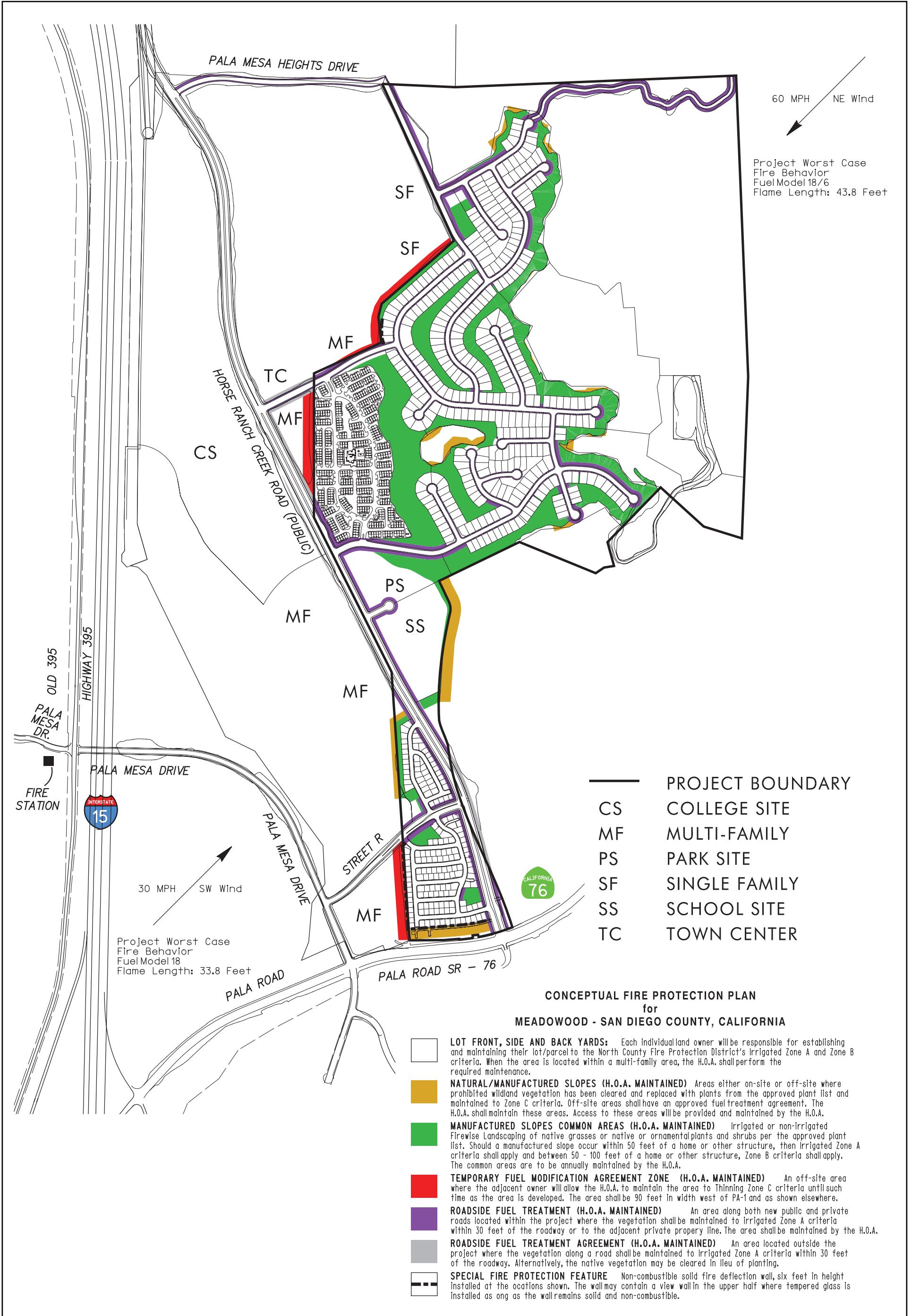


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**FIGURE 3.6-4**  
Historical Wildfire Boundaries





NO SCALE



FIGURE 3.6-5  
Fire Protection Plan